



Loudoun County, Virginia

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Office of the County Administrator

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At a business meeting of the Board of Supervisors of Loudoun County, Virginia, held in the County Government Center, Board of Supervisors' Meeting Room, 1 Harrison St., S.E., Leesburg, Virginia, on Wednesday, July 16, 2014 at 4:00 p.m.

IN RE: SUMMARY OF URBAN LAND INSTITUTE (ULI) TECHNICAL ASSISTANCE PANEL (TAP) RECOMMENDATIONS AND PHASE 2 SILVER LINE CPAM RECOMMENDATIONS (BROAD RUN AND DULLES DISTRICTS)

Mr. Williams moved that the Board of Supervisors direct staff to prepare a work plan and scope of service documents for a land use scenario planning study for the western part of the Metrorail Service District and for a market analysis and best practices study for the land surrounding the Route 606 and 772 Metrorail Station.

Seconded by Mr. York.

Voting on the Motion: Supervisors Buona, Clarke, Delgaudio, Higgins, Letourneau, Volpe, Williams and York – Yes; Supervisor Reid – No.

  
DEPUTY CLERK FOR THE LOUDOUN  
COUNTY BOARD OF SUPERVISORS

Date of Meeting: July 16, 2014

# 7

**BOARD OF SUPERVISORS  
BUSINESS MEETING  
ACTION ITEM**

**SUBJECT:** Summary of Urban Land Institute Technical Assistance  
Panel Recommendations and Phase 2 Silver Line  
Comprehensive Plan Amendment Recommendations

**ELECTION DISTRICT:** Broad Run and Dulles

**CRITICAL ACTION DATE:** At the pleasure of the Board

**STAFF CONTACTS:** Richard Klusek AICP, Project Manager, Planning and Zoning  
Julie Pastor, FAICP, Director, Planning and Zoning

**PURPOSE:** This item summarizes the findings and recommendations of the Urban Land Institute (ULI) Technical Assistance Panel (TAP) and proposes priorities and next steps for the Board of Supervisors (Board) to consider to implement the next phase of the Comprehensive Plan Amendment (CPAM).

**RECOMMENDATIONS:** Staff recommends that the Board direct staff to develop work plans and scope of service documents for two independent studies. One study would consist of a scenario planning exercise covering the western portion of the Metrorail Service District to identify an appropriate land use mix outside the immediate station areas. The second study would be a market and best practices study to identify land use options for the Route 606 Station area that are compatible with Washington Dulles International Airport (Dulles Airport).

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**BACKGROUND:** On October 16, 2013, the Board initiated a Silver Line/Metrorail Tax District Comprehensive Plan Amendment (CPAM) (8-1, Delgaudio opposed) to evaluate the development potential of the Metrorail Service Districts which were adopted in December of 2012. The purpose of the CPAM is to evaluate the existing planned land uses around the future Metrorail Stations and to ensure that they strike the desired balance between 1) Prompt realization of tax revenues to support future Metrorail operations, 2) Maximizing future employment generation, 3) Achieving the desired land use pattern, and 4) Minimizing demands on the County's transportation infrastructure.

Subsequently, on January 15, 2014, the Board unanimously approved a two-phased approach for the CPAM where a TAP would provide broad based recommendations for Phase 1 to help guide development of a more focused scope of work for Phase 2.

The TAP was held on May 7 and May 8, 2014. The TAP consisted of a panel of nine experts representing a broad range of expertise in land use and real estate development. Prior to the TAP and consistent with requirements of the TAP program, the panelists received a briefing book prepared by staff to summarize history, existing conditions, policies, and regulations affecting the study area (Attachment 1). The TAP convened at Loudoun Station near the Route 772 Station on May 7 and received a staff presentation of the briefing book subject material. The Panel also toured the study area and met with stakeholders generally consisting of major land owners, key development focused organizations, and utility providers. Based on information ascertained from these activities, the TAP worked independently on May 8 to develop recommendations focused around the overall purpose of the CPAM as described above. The final presentation of the TAP was made on May 8, 2014 and is currently available for viewing as a webcast on the Loudoun County web page: <http://www.loudoun.gov/webcast>. A website was also created to provide information about the Silver Line CPAM process: <http://www.loudoun.gov/silverlinecpam>. A final report was delivered on July 8, 2014 and is provided as Attachment 2. Based on conversations with ULI Washington, staff anticipates that the report will complement the May 8 final presentation and will not include any new recommendations.

Following the TAP presentation, staff has been in contact with the Department of Economic Development (DED) and with the Economic Development Advisory Commission (EDAC) to discuss the results of the TAP and recommendations. The EDAC Silver Line Ad Hoc Committee's recommendations are included as Attachment 3.

This report contains a summary of the Technical Assistance Panel's recommendations as well as staff analysis and recommendations for proceeding forward on this project.

## **PART I.**

### **TECHNICAL ASSISTANCE PANEL RECOMMENDATIONS:**

During the course of the TAP final presentation, the panel made a series of direct and focused recommendations as well as several observations that were discussed in the context of other issues. While the TAP was charged with focusing on the Metrorail Service District as the study area, some recommendations pertained to planning in general and to the County as a whole. Staff has evaluated the host of recommendations made throughout the presentation and has grouped them into relevant categories. Upon review, the discussion consists primarily of broad planning and land use development concepts rather than on parcel or area specific recommendations. Staff also wishes to emphasize that given the limited amount of time available to develop these recommendations; it is likely that the TAP did not have sufficient time to fully explore the complex history of the study area, work done to date, existing policies, and the status and extent of any prior legislative approvals.

The key recommendations of the TAP include:

1. Updating the Comprehensive Plan;
2. Creating Small Area Plan(s), especially surrounding the immediate station areas;
3. Undertaking efforts to create more distinct “places” at the immediate station areas with each having a unique identity and character;
4. Preparing a market study to identify appropriate land uses or “anchors,” especially surrounding the Route 606 Station;
5. Engaging in more collaborative planning with Dulles Airport;
6. Investing in infrastructure upfront as opposed to relying on proffered improvements with indefinite time periods; and
7. Engaging in more upfront planning to set clear expectations for developers and to ensure the County’s vision is realized.

Each of these key recommendations is discussed in detail below as articulated by members of the ULI TAP panel. This section is followed by a staff assessment of the recommendations and suggestions for next steps and priorities.

## **1. Update Comprehensive Plan**

The TAP recommended that the County update the Comprehensive Plan (Revised General Plan), especially with respect to the County’s current Keynote Employment designation which envisions 100-percent premier office or research and development centers supported by ancillary retail uses. Overall the TAP felt that the County needs to decrease its reliance on Keynote Employment when attempting to attract businesses into the County and maintain a viable mix of land uses across the County.

The TAP discussed the changing office market and demographic profile that favored mixed-use urban environments. Examples of the mixed-use urban environments often cited throughout the presentation included the Clarendon, Rosslyn, and Ballston neighborhoods in Arlington, VA, as well as Reston Town Center, and National Harbor in Maryland. The TAP provided various statistics demonstrating the preference for urban environments including noting that 75 percent of all office uses currently absorbed by the market are absorbed into walkable environments. Another statistic suggested that Reston Town Center had a 60 percent price premium over the rest of Reston because of its urban environment.

With regard to the Revised General Plan, the TAP also discussed the possibility of relaxing phasing requirements so long as strategic areas of the County are well preserved for the desired types of urban environments. The TAP recommended that this be done through the creation of Small Area Plans or more detailed planning studies within the Revised General Plan for specific areas of the County, especially the station areas. These more detailed planning studies could guide development with greater precision in specific areas of the County. A discussion of

specific planning topical areas that can be examined in the Revised General Plan is discussed in Recommendation 7 below.

## **2. Create Small Area Plans**

A key recommendation made by the TAP was to create Small Area Plans, especially for the immediate Route 772 and Route 606 Station Areas. The TAP also suggested that the Route 772 Station Area was a priority. According to the TAP, a Small Area Plan could go “beyond colors on a map” to establish a detailed and integrated street network, create a cohesive identity for the area, and establish clear expectations for developers. The TAP also noted that Small Area Plans could be used as a marketing tool and suggested that there is economic benefit to laying out details such as street networks, sidewalks, trees, architectural materials, and building heights and giving perspective businesses a detailed sense of what the community will look like in the future. Likewise, Small Area Plans can be used to demonstrate future conditions to residents and to set policies for phasing and land use mix specific to the area.

## **3. Create “Places”**

The TAP recommended undertaking a series of efforts to establish a unique sense of place around the Route 606 and Route 772 Metrorail Stations. The panel felt that the current station names and efforts of the County were not adequately serving to give the stations unique identities or to establish them as destinations or places of interest. Consistent with Recommendation 2 above, the TAP felt that part of this branding effort could be achieved by creating plans to clearly demonstrate the overall character and development pattern envisioned for the Study Area. Other major parts of this recommendation included re-naming the stations, establishing a Business Improvement District (BID) or similar organization for each station area, and establishing a branding for each station that capitalizes on its assets and what makes each station and the County unique.

## **4. Prepare a Market Study**

The TAP acknowledged the uniqueness of the Route 606 Station, especially with respect to its proximity to Dulles Airport and its location within the airport flight path and Airport Impact Overlay District. Accordingly, the TAP recommended conducting a market study to identify uses that can be successful in this area and capitalize on the assets of a major international airport. One specific example discussed was a major convention center like National Harbor in Maryland. The panel felt that the proximity of the airport could make a use like a “fly-in convention center” viable.

## **5. Plan with the Airport**

The TAP recommended that the County engage in detailed planning with Dulles Airport. More specifically, that it was important to jointly plan for all land near the Route 606 Metrorail Station to assist in defining the character and purpose of the station area and in giving that station area an

identity. The TAP felt that land use plans should be in place for both the north and south sides of the Route 606 Station.

The TAP also recommended studying the airport noise contours. Based on discussion in the final presentation, it was apparent that the TAP did not reach unanimity with regard to their position on the airport noise contours and the most appropriate land uses for the Route 606 Station.

## **6. Invest in Infrastructure**

A key recommendation made by the TAP was to invest in infrastructure to support development surrounding the Metrorail Stations upfront. The TAP suggested having plans for a detailed road network and constructing roads upfront as opposed to using proffers to build roads at uncertain times. In addition to Countywide Transportation Plan (CTP) roads, the TAP also discussed the benefits of planning and building a more detailed local road network. The stated benefits included cohesiveness that would help define the sense of place and assurances that the roads can be built with the design features desired by the County. The TAP stated that there was an economic benefit to building roads upfront. Similarly, the TAP emphasized the importance of having a well laid out bicycle and pedestrian network surrounding the Metrorail Stations to enhance the urban environment around the Metrorail Stations and to facilitate crucial bicycle and pedestrian connections to the stations.

## **7. Other Ideas/Recommendations**

Throughout the course of the final presentation, the TAP discussed a range of topics and made suggestions that applied broadly to planning and the County without specifically focusing on any of the key recommendations above. Relevant examples of these topics included types of urban areas, experiences with high-density multi-family development, process and phasing requirements, and interim land uses.

The TAP repeatedly discussed the increasing preference for walkable urban places as opposed to suburban areas throughout their presentation. In doing so, they also described different types and scales of urban areas that can be considered by the County. As noted by the TAP, the immediate area surrounding the stations should be preserved to provide the highest densities including a significant portion of the County's planned office space and a mixture of high-density retail and residential development. However, the TAP also noted that there was potential for smaller urban centers that provide high-density residential and retail development in compact centers with more limited office development. The TAP noted that the critical element to be considered in these centers is an urban form to promote walkability and well-defined boundaries to ensure that the development remains compact. The TAP suggested that creating a desirable, walkable urban environment was more about dictating the form of development than it was about dictating the specific uses. Having the form set was said to provide increased flexibility and adjustments for market conditions.

Consistent with the recommendations to create urban areas, the TAP noted that successful walkable urban areas generally require multi-family residential development. The TAP stated that high-density, multi-family development generally does not result in large numbers of school age children as compared to more traditional suburban housing types found elsewhere in the County. The TAP anecdotally described residents of high-density urban developments as young professionals that supported local businesses while requiring minimal services from the County. Also related to multi-family development, the TAP recommended that residential development in urban areas be calculated by Floor Area Ratios (FARs) as a measure of density instead of the number of dwelling units per acre. According to the TAP, a maximum FAR is likely to result in smaller units with fewer school children than a maximum number of dwelling units that the County currently uses.

The TAP made several recommendations in terms of process and phasing that they felt were necessary to achieve this desirable urban form. One such recommendation was to give developers an easier process with more certainty of the final outcome. The TAP felt that the key way to accomplish this was by doing more detailed upfront planning that sets clear expectations for developers. The TAP also said that more detailed upfront planning can allow for more relaxed phasing requirements and the ability to adjust for market conditions so long as expectations remained clear and that the most important areas be preserved for the highest and best land uses.

Another component of this relaxed phasing requirement discussed by the TAP was the potential for interim uses. The key argument made by the TAP relating to interim uses is that they are acceptable as long as they do not preclude the type of development ultimately desired for the future or make the area less desirable. One referenced example of an acceptable interim use was a surface parking lot that can easily be redeveloped into structured parking at a future date. However, the TAP also discussed data centers as uses that should not be permitted in the County's urban centers, specifically in proximity to the proposed Metrorail Stations.

## **PART II.**

### **STAFF ANALYSIS AND RECOMMENDATIONS:**

Staff recognizes potential benefits in acting on all of the recommendations presented by the TAP but has identified two priorities that appear to best address the overall intent of the Silver Line CPAM. These priorities, as described below, would include a scenario planning study for the western portion of the Metrorail Service District and a market analysis and airport best practices study for the Route 606 Station. Conceptual boundaries of the study areas are shown in Figure 1. Staff anticipates that both of these studies would occur simultaneously with an overall timeframe of 12 to 15 months. Staff has also provided an analysis of the TAPs other recommendations should the Board wish to further consider efforts or these options.

## **A. Conduct a Scenario Planning Study**

While the TAP's priority was the Route 772 Station area, staff believes that the County can benefit more from updated visioning beyond the immediate Station area where much of the land is currently planned as Keynote Employment. As such, staff recommends a scenario planning exercise covering the western portion of the Metrorail Service District to identify an appropriate land use mix.

Staff feels that a scenario planning study is an important step in setting an updated vision for the portion of the Metrorail Service District that has not already been rezoned. The eastern portion of the Metrorail Service District has largely been studied as part of the Route 28 CPAM and that process was just completed through adoption of overlay zoning districts. However, the vision for the western portion of the Metrorail Service District outside of the Route 28 CPAM area has not been studied since adoption of the Revised General Plan in 2001. The specific boundaries of the recommend scenario planning study would be determined during the scoping of the study, but staff believes that the study should generally cover land west of the Route 28 CPAM area excluding the areas immediately surrounding the Route 606 and 772 Stations which are appropriate for more specific and detailed studies.

The scenario planning exercise envisioned by staff would broadly consider a range of potential land use scenarios and the impacts and benefits they would have on the County. For example, the County can consider the current planned land use as one scenario and compare it to a scenario that allows for an increased mix of uses including an increased amount of residential development. The study would evaluate parameters such as tax generation, fiscal impact, school generation, number of vehicle trips, and walkability. As part of this effort, stakeholder groups could be involved to help identify the potential scenarios and parameters to be evaluated and to provide feedback on the results of the scenario testing. Those alternative land use scenarios that provide additional stress on the currently planned transportation network can subsequently be evaluated to assess additional costs of commensurate transportation infrastructure that is currently not planned or programmed. Preferred scenario(s) can then be used to redefine the planned land use for the Metrorail Service District through a CPAM/land use plan that gets incorporated into the Revised General Plan and any future iterations of the Comprehensive Plan. Staff also recommends that the planning concepts and ideas discussed by TAP in Recommendation 7 be considered as part of this effort.

## **B. Conduct a Market Analysis and Best Practices Study for the Route 606 Station**

The second study recommended by staff is a market study and best practices study to identify land use options immediately surrounding the Route 606 Station area that are compatible with the Airport. As noted by the TAP, land use at this station should have synergies with Dulles Airport. Unlike Route 772, the Route 606 Station has not seen any detailed land use planning through legislative applications. This study has the potential to identify uses that had not previously been considered and to provide market justification for uses that had previously been contemplated.



As part of this study, staff also recommends evaluating best practices and development trends for airports around the world to help develop a land use plan that considers the full range of compatible land uses and land development configurations appropriate for airport areas. In addition to compatibility, the study can evaluate safety of development around airports and the economic impacts of various development types. Staff acknowledges that members of the TAP seemingly advocated for allowing residential development in the airport flight paths. In addition to a host of other potential land uses, this best practices study can evaluate experiences with residential development around airports which has been discussed in the past in the context of the Route 606 Station. Other land uses and emerging trends in airport development should also be considered. Staff also envisions involving Dulles Airport representatives to ensure that planning done for the station incorporates potential development on airport property as part of this study. Based on the expertise and independent analysis required for this effort, staff anticipates that the work product will not involve specific stakeholder groups. The results of the market analysis and best practices study can be used to create a Small Area Plan if deemed appropriate by the Board.

With regard to studying noise contours, staff does not believe that revisiting them is advisable or beneficial at this time. Regardless of the precise location of the LDN 65 boundary, aircraft will continue to fly overhead and will produce noise. Identifying uses that are compatible with the overhead aircraft and setting the overall policy direction for the Route 606 Station area is believed to have greater value as an initial step in preventing airport related land use conflicts. Staff further notes that the airport has been the County's driving economic engine since the 1960's and that it has the capacity to significantly grow in terms of aircraft volumes. Therefore, in the absence of a significant policy shift to suggest otherwise, staff recommends that land use planning at the Route 606 Station maintain the focus of preserving the airport's economic vitality and growth potential.

## **Discussion of Other TAP Recommendations**

### *Revised General Plan*

The TAP recommended updating the Revised General Plan and also provided a series of planning concepts that should be considered in all of the County's planning. Based on the Board's existing Strategic Plan discussions, staff acknowledges that a rewrite of the Revised General Plan will likely be initiated in FY2016. Many of the issues raised by the TAP (e.g. Keynote Employment which is a countywide issue) will be best addressed at that time. Staff agrees with the need to examine types of urban areas, high-density multi-family development, process and phasing requirements, and interim land uses as suggested by the TAP. These planning concepts should be studied in further detail with any future planning efforts undertaken by the County, especially for updates to the Revised General Plan.

### *Route 772 Station*

As stated above, staff realizes that the TAP recommended looking at the Route 772 Station as a priority, however, the vast majority of the land in close proximity to the Route 772 Station is

controlled under the Moorefield Station (ZMAP 2001-0003) and Loudoun Station (ZMAP 2002-0005) rezonings. At the time of these rezonings, staff worked with the applicants to develop Concept Development Plans (CDPs), proffers, and design guidelines that include many of the Small Area Plan elements discussed by the TAP. While staff's briefing to the TAP included information about these and other rezonings, it is unclear as to whether or not the TAP was fully aware of the extent of these previous work efforts to develop design guidelines and the level of detail in the CDPs. Furthermore, the County's current Transit Oriented Development policies for the Route 772 Station and approved rezonings largely implement the TAP's overarching recommendation to develop a walkable urban community surrounding the Station.

Nevertheless, staff does acknowledge the benefits of preparing a Small Area Plan for the Route 772 Station. Should the Board choose to go this route, it may be beneficial to develop a single set of graphics to demonstrate the overall look, feel, and character of the Station area as suggested by the TAP. For example, diagrams and 3D drawings like the ones the TAP showed for Clarendon combining the land development potential for areas surrounding the Station can be created to give clear depictions of anticipated future conditions based on proffers and design guidelines currently in place. However, given the expected dynamic nature of development around the Stations, information and drawings can quickly become outdated. As such, any efforts to create and maintain such graphics may be more appropriately undertaken "in house" when staff resources are available.

Another aspect of a Small Area Plan that can benefit the County is a closer look at policies that deal specifically with the station areas. Given the TAP's recommendation to respond to market conditions and the Board's direction to encourage prompt realization of tax revenues into the district, there may be opportunities to develop more specific policies related to phasing, parking, and land use mix near the stations to encourage development. Regardless of any modifications to Plan policies or zoning districts, approved rezoning applications already exist around the Route 772 Station and changes to proffers, the development program, and phasing of development would require Zoning Concept Plan Amendments (ZCPAs) to be initiated.

#### *Create "Places" and Invest in Infrastructure*

Staff supports the recommendations of the TAP regarding the benefits of branding the station areas. These branding efforts, where not already underway, would likely be best led through initiatives of the DED in concert with major stakeholders. Staff further acknowledges that Small Area Plans can assist in demonstrating the vision for each station area and visually describing the "place" and amenities that will be created at each station area.

Staff also sees benefits to having a road network in place prior to development occurring. Having a road network in place will support future development and can provide economic incentive to encourage that development to occur sooner. The TAP acknowledged that many roadways surrounding the Route 772 Metrorail Station were already planned and proffered but felt that constructing these roads in advance and having developers reimburse the County could have economic benefits. Notwithstanding, the Board may wish to explore additional options to expedite construction of these roadways similar to what has been done for Gloucester Parkway

and Moorefield Boulevard. In general, staff recommends that efforts to develop infrastructure and sense of place should be incorporated into planning efforts undertaken by the County.

**ALTERNATIVES:** The Board may choose to direct staff to prepare scope of work documentation for the two staff recommended studies, or to initiate studies or plan amendments to address any combination of activities or TAP recommendations outlined above, to take no action, or to initiate other activities at their discretion. The Board may also recommend how efforts should be conducted using any combination of staff resources and consultant services. Should the Board wish to consider an alternative approach, staff notes that proceeding without consultant services would likely impact the length of the project, the availability of staff resources for other Board initiatives and the depth of analysis, knowledge and experience provided by independent consultants.

**FISCAL IMPACT:** Under the staff recommendation, the scope of work documentation and work plans would be prepared for each of the two studies using existing staff resources. Therefore, there is no direct fiscal impact associated with the recommended action. However, staff does anticipate that the work plan to be presented to the Board will call for consultant services for each of the recommend studies with the consultant team being responsible for primary activities and deliverables with overall coordination by the County Project Manager assigned to the initiative.

**DRAFT MOTIONS:**

1. I move that the Board of Supervisors direct staff to prepare a work plan and scope of service documents for a land use scenario planning study for the western part of the Metrorail Service District and for a market analysis and best practices study for the land surrounding the Route 606 Metrorail Station.

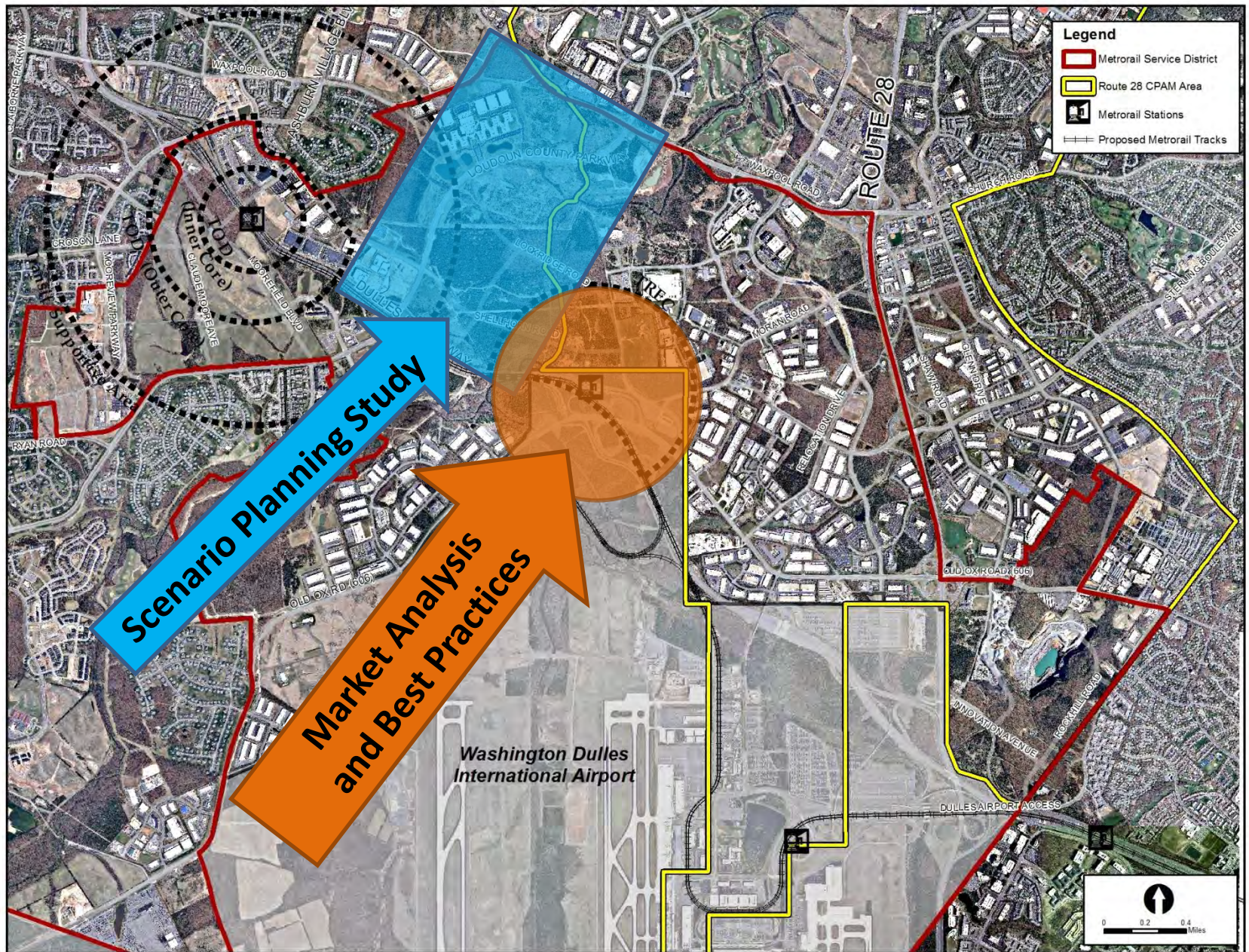
OR

2. I move an alternate motion.

**ATTACHMENTS:**

1. ULI Washington Technical Assistance Panel Briefing Book
2. Technical Assistance Panel Final Report
3. July 11, 2014 Memo from EDAC to BOS





Prepared by the Department of Planning, March 2014

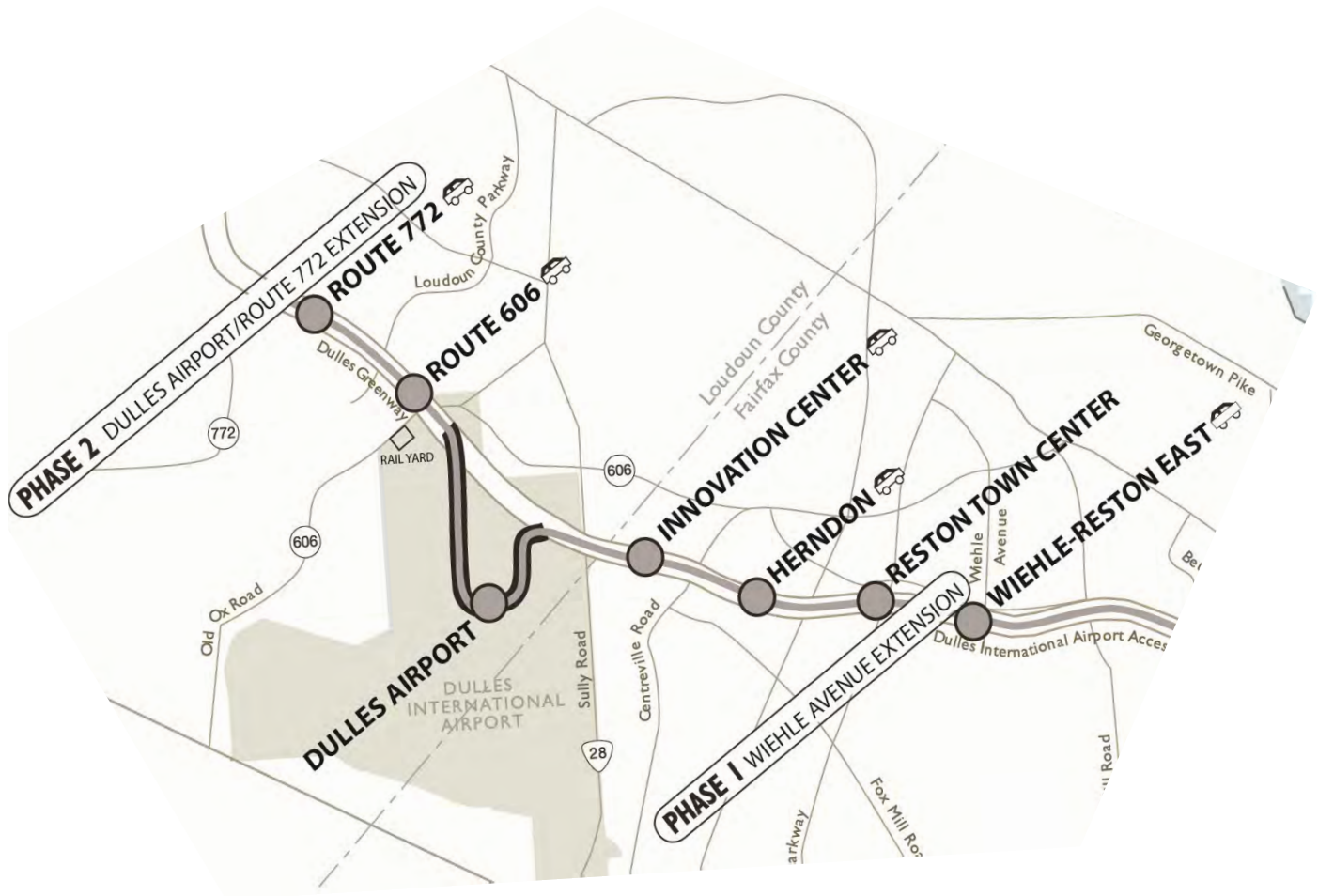
Conceptual Study Areas

Figure 1



# ULI WASHINGTON TECHNICAL ASSISTANCE PANEL BRIEFING BOOK

## Metrorail Service District Study



PREPARED BY:



Loudoun County Government  
Department of Planning

April 2014

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**ULI WASHINGTON**  
**TECHNICAL ASSISTANCE PANEL**  
**BRIEFING BOOK**

Metrorail Service District Study

## **Introduction**

Loudoun County has been planning for the arrival of Metrorail Service for decades and soon extension of the Silver Line into the County will become a reality. The County has land use plans for the future Metrorail Stations that were conceived with the Toll Road Plan in 1995 and refined with the adoption of the Revised General Plan in 2001. The County also adopted a land use plan in March 2011 for the area just west of the Fairfax County, Route 28/CIT Station with approval of the Route 28 Corridor Plan Comprehensive Plan Amendment.

### ***Profile of Loudoun County***

Loudoun County is located 25 miles west of Washington, DC, in the Washington Metropolitan Area (see Figure 1). The County is approximately 520 square miles in size and includes several incorporated towns and residential communities as shown in Figure 2. Loudoun County was first settled between 1725 and 1730. For more than two centuries, agriculture was the dominant way of life in Loudoun County, which had a relatively constant population of about 20,000. That began to change in the early 1960s, when Washington Dulles International Airport (Dulles Airport) was built in the southeastern part of the County. Following the construction of the airport, new business and residential development have dominated growth in the County's historically agricultural economy.

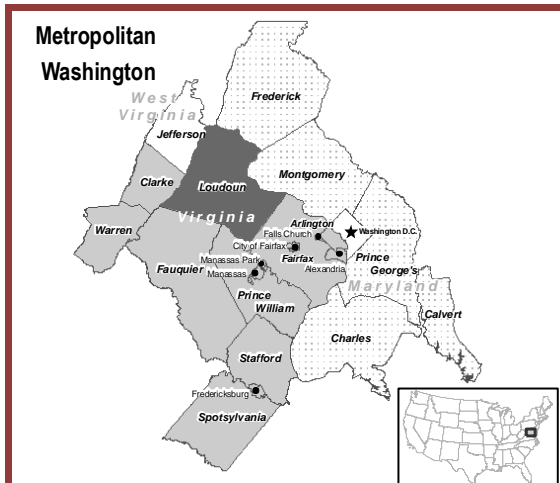
The County estimates the 2013 population to be 340,112. The eastern portion of the County is developing rapidly as a result of its proximity to Dulles Airport, Washington D.C., the rest of the Washington metropolitan area, and its suburban land use pattern. The western portion of the County, bordered by the Blue Ridge Mountains to the west and the Potomac River to the north, maintains a rural and historical environment, and is designated to remain primarily rural per the County's Revised General Plan land use policies. The County's economy continues to grow, and is responsible for a considerable share of Northern Virginia's job growth during the past few years. Several major companies in the telecommunications, information and airline industries are located in the County.

### ***Project Overview***

On December 5, 2012 the Board of Supervisors established a Dulles Metrorail Service District (see Figure 3), which is a tax district created to help fund construction costs associated with Metrorail operations which are anticipated to begin in 2018. Given the establishment of this Tax District, the Loudoun County Board of Supervisors initiated a Silver Line/ Metrorail Tax District Comprehensive Plan Amendment on October 16, 2013 to evaluate the development potential of the Dulles Metrorail Service District. The purpose of the Comprehensive Plan Amendment is to evaluate the existing Planned Land Uses around the future Metrorail Stations and to ensure that they strike the desired balance between 1) Prompt



The Dulles Corridor Metrorail (Silver Line) will run in the median of the Dulles Greenway.



Loudoun County is located approximately 25 Miles West of Washington, DC.

realization of tax revenues to support future Metrorail operations, 2) Maximizing future employment generation, 3) Achieving the desired land use pattern, and 4) Minimizing demands on the County's transportation infrastructure.

The land closest to the planned Route 772 Station has already been rezoned for transit-related development with approval of ZMAP 2001-0003 (Moorefield Station) and ZMAP 2002-0005 (Loudoun Station). No major development has been formally proposed surrounding the planned Route 606 Station but the county has recently approved a rezoning close to the Route 28/CIT Station (ZMAP 2008-0018 Dulles World Center). Each of these station areas and development plans surrounding the district are discussed in further detail below.

This briefing book is intended to inform the Technical Assistance Panel (TAP) of existing conditions in the Study Area and policy and regulatory documents currently in place. In addition, previous efforts pertaining to the study and factors that can potentially influence the overall implementation of Metrorail are summarized. A resources section at the end of this Briefing Book provides links to more detailed discussion of the issues and to the complete studies and documents referenced throughout this briefing book.

## **The Assignment**

Given the Planned Land Use defined in the County's plans which already envisions the arrival of Metrorail, Loudoun County is seeking the assistance of a Technical Assistance Panel to provide a "reality check" to ensure that the County's Policy and regulatory documents enable the balance described above. Loudoun County envisions the TAP as an opportunity to gather experts from various disciplines to discuss the current Planned Land Uses in the context of today's market conditions and cutting edge trends in land development. The goal of the TAP is to identify the areas, if any, where the County's policy documents, regulatory documents, or infrastructure have shortcomings with respect to achieving the balances described above. Any shortcomings specifically identified by the TAP would help position the County to develop a more refined scope of work to address those issues in a subsequent effort.

Specifically, Loudoun County is seeking the assistance of a ULI TAP to determine if the County's Revised General Plan provides a Planned Land Use mix within the Metrorail Service District that strikes a desired and beneficial balance between 1) Prompt realization of tax revenues to support future Metrorail operations, 2) Maximizing future employment generation, 3) Achieving the desired land use pattern, and 4) Minimizing demands on the County's transportation infrastructure. As such, the County is seeking insight on the following questions.

## **Market Realities**

1. To what extent is Loudoun County positioned to capture new commercial growth that has not been previously considered?
2. Given local and regional conditions, what is a reasonable timeframe to anticipate significant build-out of the Study Area?
3. To what extent does the planned Metrorail Service and proximity to Washington Dulles International Airport offer significant competitive advantages compared to other areas in the County?
4. Do the existing plans, policies, and/or regulations inadvertently constrain opportunities to capture a new mix of uses? If so, how can this be remediated?
5. What strategies can the County employ to achieve expeditious realization of tax revenues to support Metrorail operations?



## Infrastructure

6. To what extent does the planned infrastructure meet the needs of the future market demand?
7. Are there unplanned capital facilities that the County should anticipate? If so, what strategies should the County implement to accommodate these facilities?

## Transit-Oriented Development

8. To what extent does the planned transportation network adequately and efficiently serve the Planned Land Use?
9. To what extent does the network and Planned Land Use encourage use of Metrorail?
10. To what extent does the network and Planned Land Use encourage pedestrian and bicycle circulation?

## Existing Land Use

11. To what extent do existing land uses within the Study Area affect achievement of the overall vision for the Study Area?

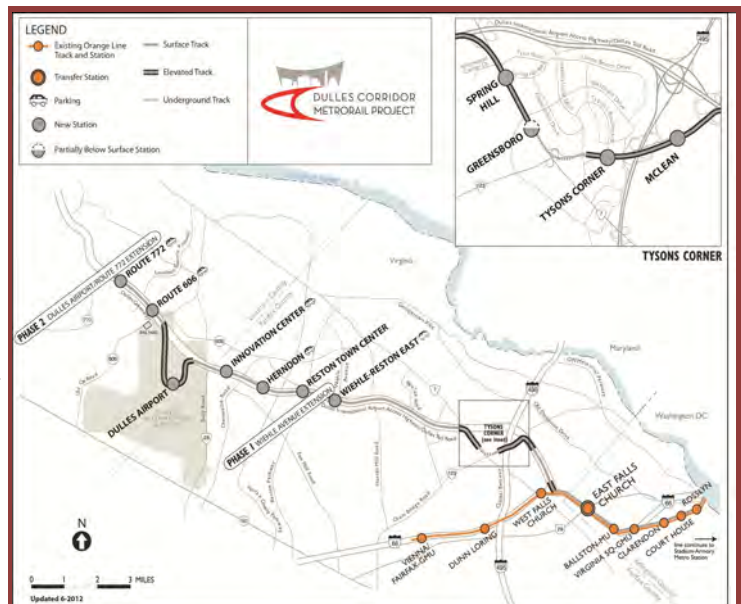
## Planned Land Use

12. Is the County's Planned Land Use realistic given projected market conditions, infrastructure availability, TOD efforts, and the existing land use pattern? If not, what are some strategies the County can implement to achieve the overall vision for the Study Area?

## The Silver Line

The Metropolitan Washington Airports Authority (MWAA) is constructing a 23-mile extension of the existing Metrorail system. This extension which will be known as the Silver Line and will run from the existing East Falls Church Station through Washington Dulles International Airport, to Ashburn (See Figure 4). The project is being built in two phases. Phase One will run from East Falls Church to Wiehle Avenue in Reston and is expected to be completed in 2014. Phase 2 will run from Wiehle Avenue to Ashburn in eastern Loudoun County and will terminate at the proposed Route 772 Station. Phase 2 is scheduled to be completed in 2019.

Loudoun County has been a longtime supporter of the extension of Metrorail to Washington Dulles International Airport and Loudoun County. The County has been actively planning for the extension of Metrorail to the Dulles Corridor for over 30 years. Detailed planning for Metrorail expansion first appeared in County documents in the 1995 Toll Road Plan and 1995 Countywide Transportation Plan. The current 2001 Revised General Plan contemplates transit nodes at the Route 772 and 606 Stations and refines these plans. Plans for these transit nodes were refined in the 2001 Revised General Plan.



The Dulles Corridor Metrorail (Silver Line) will run from Route 772 in Loudoun County to East Falls Church and continue into Washington, DC.

## **Study Area**

The Loudoun County Board of Supervisors established a Metrorail Service District on December 5, 2012 to help fund construction of the future rail service. That district is the Study Area for this project (see Figure 3). In some instances, the Metrorail Service District is also referred to as the Metro Tax District, Silver Line Tax District, Silver Line CPAM area, and similar names but these terms generally all refer to the same geographical area of the “Metrorail Service District” as formally adopted.

The District was established for the purpose of providing public transportation systems serving each station. Revenue is used specifically for the construction of any related facilities and structures including parking facilities; a rail yard; vehicular and pedestrian access; electrical facilities and equipment; studies, assessments and analysis of environmental and other impacts; local, state and federal government approvals; environmental preservation and mitigation; acquisition of real property or easements; rail lines; relocation of roadways; and engineering and legal costs related to the Metrorail project.

As shown in Figure 3, the district encompasses 641 parcels and 14,328 acres including the Washington Dulles International Airport Property which is the largest property in the district. The district is located along the Dulles Greenway Corridor which is a privately funded and operated toll road serving Loudoun County. The median of the Dulles Greenway will also provide the right-of-way for the future Silver Line Metrorail Service. In addition to the Metrorail Service District, portions of the Study Area fall within a Route 28 Tax District intended to fund highway transportation improvements along Route 28.

With the Metrorail Service District, supplemental real property taxes are assessed (as of 2013) on parcels within the boundaries at an effective rate not to exceed \$0.20 per \$100 of assessed value exclusive of all other applicable taxes and are collected by the County Treasurer in the same manner the county-wide real property tax is administered.

The County also adopted a Route 606 – Airport Stations Service Tax District and Route 772 Station Service District to provide funding for operational costs and public transportation systems serving the Districts. These districts were adopted with the Metrorail Service District currently in place but rates are not yet assessed. Like the Metrorail Service District, supplemental real property taxes will be assessed on parcels within the boundaries at an effective rate not to exceed \$0.20 per \$100 of assessed value. The intent is for these districts to have minimal effective rates until the term of the Metrorail Service District expires. The 606 and 772 districts are intended to provide revenue continuing beyond the term of the Metrorail Service District for the purpose of funding the ongoing payments to the Washington Metropolitan Area Transit Authority (WMATA) to provide Metrorail transit service to the stations.

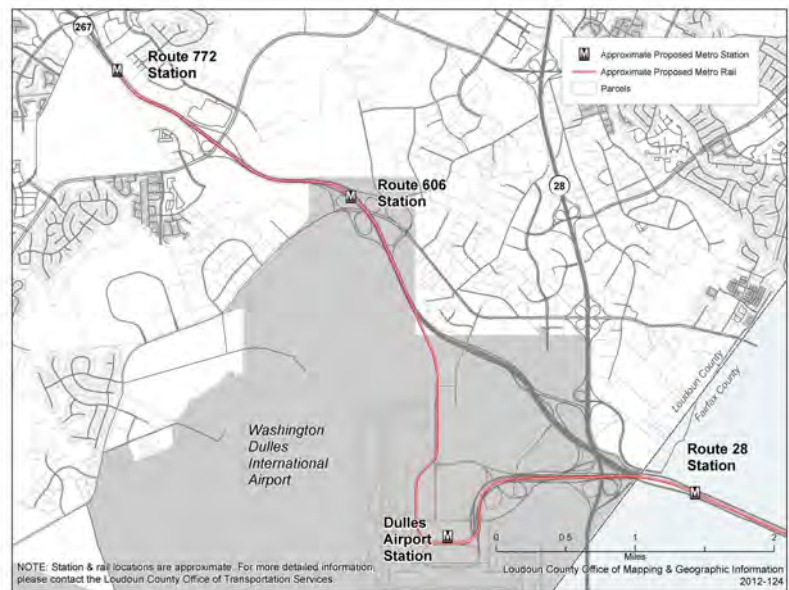


The Metrorail Service District covers land in close proximity to the planned Silver Line Metrorail stops (see detail in Figure 3).



Adoption of the districts came after an extensive public process, including public information sessions attended by representatives from the County's Department of Management and Financial Services, the Office of Transportation Services, and the Public Affairs and Communications Division, along with representatives from the Washington Metropolitan Area Transit Authority and the Metropolitan Washington Airports Authority.

As shown in Figure 5, there are three Metrorail Stations proposed in Loudoun County and a fourth station at the Loudoun/Fairfax County Border in Fairfax County that also serves Loudoun County. Each of the stations have a unique history and provide a



There are 3 Metrorail Stations planned within Loudoun County (see detail in Figure 5).

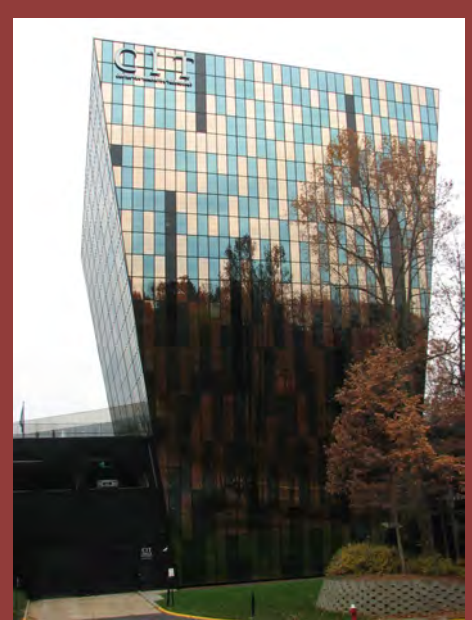
unique set of opportunities and constraints for development surrounding the stations. The discussion below provides an overview of the factors affecting each station and discussion throughout this report provides further details.

### **Route 28/CIT Station**

The Route 28/CIT Station will be located in Fairfax County but land in the eastern most portion of Loudoun County will be roughly 0.5 to 0.75 miles from the Station. The Revised General Plan, and more specifically the Route 28 Corridor Plan envisions the area surrounding the station as a Mixed-Use Office Center. Concurrent with adoption of the Route 28 Corridor Plan, the area closest to the station was also approved for a rezoning request (Dulles World Center, ZMAP 2008-0018). This rezoning allows for 4.1 million square feet of non-residential office and retail space and 1,265 multi-family residential units. The Route 28 Corridor Plan was adopted in March 2011 based on significant stakeholder involvement and interjurisdictional discussion.

### **Dulles International Airport Station**

The Dulles Airport Station will be located on Washington Dulles International Airport property and is primarily intended to serve the terminal building of the airport for arriving and departing passengers. Due to the airport location, Loudoun County does not have land development jurisdiction over the station or land surrounding the station. It should be noted that the Airport first opened in 1962 and that it has been expanding ever since with 22.6 million passengers served in 2012. At full build-out, the airport is planned to serve up to 55 million passengers with an additional runway and expanded concourses planned. As such, the planned Metrorail Station plays an important role in future airport operations.



A proposed Metrorail stop will be located at The Center for Innovative Technology Building along Route 28 and the Dulles Toll Road in Fairfax County

### **Route 606 Station**

The Route 606 Station is also proposed to be located on Washington Dulles International Airport Property. However, land immediately adjacent to the station north of the Dulles Greenway is under the jurisdiction of Loudoun County. Nearby, land is currently used as a commuter park and ride lot given its convenient access to the Dulles Greenway and Washington, DC. There are several factors that have driven land use plans for the 606 Station. An especially unique factor affecting development near the Route 606 Station is noise associated with the airport flight path located directly above the station. Figure 6 shows the Ldn noise contours associated with the current and planned airport runways that have been incorporated into Loudoun County Planning Documents and the Zoning Ordinance. Specifically, the county has policies and a zoning overlay district that prohibits residential development within the Ldn 65 area. Details of Planned Land Use and the zoning overlay for the 606 Station is discussed in detail below.

### **Route 772 Station**

The Route 772 Station has been planned for Transit-Oriented Development (TOD) since adoption the 1995 Toll Road Plan. TOD plans for the Route 772 Station are also detailed in the 2001 Revised General Plan which superseded the Toll Road Plan. Land on either side of the planned Metrorail Station has been rezoned through developer driven initiatives to allow for future TOD development but the majority of this land lies undeveloped today. The two most notable rezonings surrounding the Route 772 Station are Loudoun Station (ZMAP 2002-0005) on the north side of the station and Moorefield Station (ZMAP 2001-0003) on the south side of the station which are described in detail below.



The Silver Line will stop at Dulles Airport which is planned to serve up to 55 Million Passengers.



The Route 606 Station will be located in the Median of the Dulles Greenway near the Route 606 interchange and the existing County owned park and ride lot.



The Route 772 Station will be located in the Median of the Dulles Greenway. In general, the land immediately surrounding the proposed station location is currently undeveloped.



While these two rezonings have been approved, relatively little of the land area has been developed to date. Some development has occurred on the north side at Loudoun Station but the area closest to the station with the highest proposed densities remains undeveloped. Construction activity is expected to increase in the coming years as the opening of the Silver Line approaches.

### ***Proposed Land Use***

Details of the County's Comprehensive Plan, the Revised General Plan, are discussed below. However, for context, it should be generally noted that the Planned Land Use discussion in the Plan contemplates two unique transit nodes at the Route 606 and Route 772 Stations. The two nodes are very different, in terms of their function and design, and as such are denoted as a Transit-Oriented Development (TOD) and a Transit-Related Employment Center (TREC).

The TOD is targeted to the areas within one-half mile of the Route 772 Station. Areas outside the TOD are planned for business and employment uses located along the Dulles Greenway Corridor.

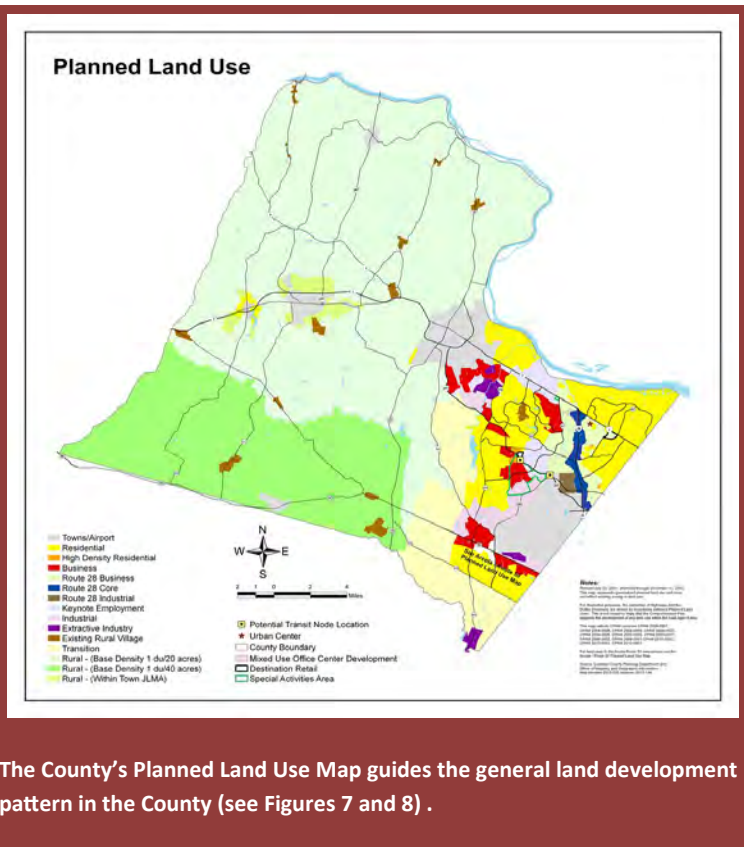
The TREC is planned to be located to the north of the Dulles Greenway, north and west of the Route 606 Station. The TREC is planned for concentrated employment use or a Special Activity use without a residential component because of the constraints of the Dulles Airport 65 Ldn and the Dulles North Transit Center. TREC policies also recognize the importance of preserving the natural environment around the Broad Run.

The Revised General Plan also includes the Route 28 Corridor Plan which was a March 2011 amendment to the Revised General Plan. The Route 28 Plan envisions Route 28 as a major employment center with a core of premier office development focused along the corridor itself. Other employment focused business uses are planned

outside the core. Another key component of the Route 28 Plan is allowance for three Mixed-Use Office Centers that allow for compact, high-density residential development which is otherwise not envisioned in the Route 28 corridor. The approved Dulles World Center development (discussed in detail below) is near the Route 28/CIT Station and falls under the Mixed-Use Office Center designation. The two other mixed-use office center areas are not within the Study Area.

### ***Major Land Uses/Landmarks***

Given the relatively short history of major development activity in Loudoun County, there are still several vacant areas scattered among the pockets of developed land. Figure 9 provides an aerial photograph that demonstrates the overall land development pattern. The area in Loudoun County surrounding the proposed Route 28/CIT Station is largely vacant. Nearby uses include an active rock quarry and airport parking areas. West of the proposed station, near the intersection of Route 606 and Pacific Boulevard there are some office buildings which represent some of the only Class A office buildings currently in the Study Area.



Just west, near the intersection of Route 606 and Ariane Way, there are a variety of light to heavy industrial uses which include warehousing and trucking operations, manufacturing, flex uses, and a concrete plant. This land use pattern continues along Route 606 to its intersection with the Dulles Greenway and is largely reflective of the underlying industrial zoning and Planned Land Use surrounding Washington Dulles International Airport.

At the Route 606/Dulles Greenway Interchange, there is a County-owned and operated commuter park and ride facility that provides bus service to Washington DC. This park and ride lot is located east of the planned Route 606 Station. Areas north and east of the station are generally vacant or developed with light industrial uses.



Office Space at Route 606 and Pacific Boulevard.



The Route 606 corridor has an industrial character west of the Dulles Greenway Interchange.



The Mercure Industrial Park contains a wide range of light to medium industrial uses with high quality design.

West of the interchange along Route 606, there is additional light industrial development known as the Mercure Industrial Park. This area is characterized by a generally more modern industrial design and consistent feel in comparison to the development east of the interchange.

Much of the area along the Dulles Greenway west of the Route 606/Dulles Greenway interchange also lies vacant and is somewhat constrained by floodplain areas. Exceptions include data centers in the northwest quadrant of the Dulles Greenway and Loudoun County Parkway and a mix of hotels, gas stations, and residential development in the southwest quadrant. Just west of the data centers on the north side of



Much of the land surrounding the future Route 606 Station is currently vacant.



the Dulles Greenway, is the site of the future Loudoun Station development which will be on the north side of the Route 772 Station. There is some active construction associated with this development. West of Loudoun Station, there is a retail development known as Ryan Park Center which includes a Giant grocery store, Home Depot, and smaller strip retail uses. Some professional office uses are also located along the western edge of Ryan Park Center. The land on the south side of the Dulles Greenway near the proposed Route 772 Station is currently vacant but comprises the planned Moorefield Station development. The western most portion of the Study Area in the southwest part of Moorefield Station is currently being developed with mixed-use development and is intended to be part of the “transit-supportive area” for the TOD. This area provides mixed use development at lower intensity than the inner and outer TOD areas.



Land at Loudoun County Parkway and the Dulles Greenway is developed with hotels and a gas station.



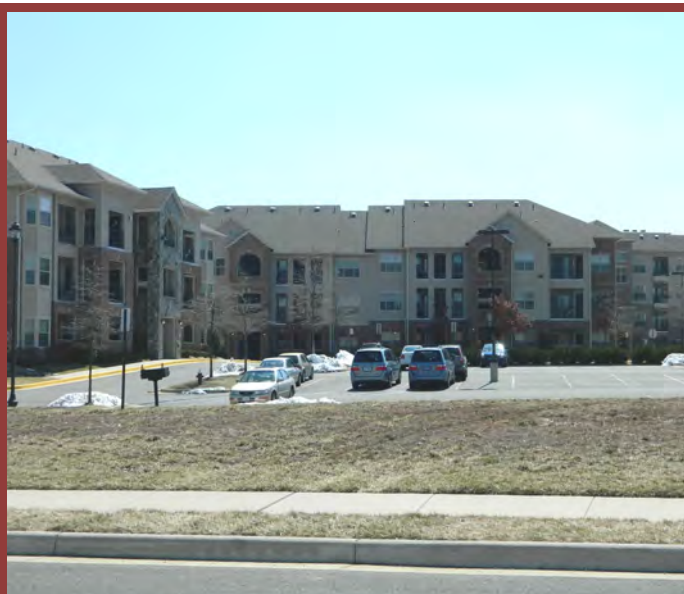
Existing and under construction data centers at Loudoun County Parkway and Shellhorn Road. The Route 772 Metrorail Station and Loudoun Station development is located just behind these data centers.



Construction activity at the Loudoun Station development adjacent to the planned Route 772 Metrorail Station.



Ryan Park Center just west of the Route 772 Station at the intersection of Shellhorn Road and Ashburn Village Boulevard provide strip retail development and professional office space.



Moorefield Village is a mixed-use development in the western most part of the Study Area at Loudoun County Parkway and Mooreview Parkway. This development is part of the "Transit Supportive Area" associated with the Moorefield Station rezoning described below.

### ***Vacant Land***

While there are significant areas of land that appear vacant, it is important to note that much of this land is controlled by a small number of landowners and has already been rezoned and contemplated for future development. These rezoning applications are discussed below. Another significant area of land that appears vacant is controlled by Washington Dulles International Airport. While this land does have some development potential, it is outside the County's jurisdiction. Figure 10 shows the vacant land within the Study Area that has been rezoned since 2001. It is generally assumed that the land rezoned later than 2001 will be developed according to the Concept Development Plan (CDP) on file for that rezoning.



Land Associated with the Loudoun Parkway Center Development (ZMAP 1990-0015) at the corner of Loudoun County Parkway and Barrister Street was approved for commercial development and roadways were built in the area but that land lies vacant.



It is, however, important to note that other rezonings were approved in the Study Area prior to 2001 and that those properties can still develop according to their approved CDP. For example, Loudoun Parkway Center (ZMAP 1990-0015) was approved for 1,010 dwelling units and between 2.7 and 3.4 million square feet non-residential development. The World Com Rezoning (ZMAP 1998-0003) was approved for up nearly 4.7 million square feet of non-residential development. In both cases, only a small amount of the approved development has actually been built.

### ***Environmental Constraints***

As shown in Figure 11, areas of floodplain associated with Broad Run, Horsepen Run, and their tributaries represent the most notable environmental constraints in the Study Area. There are also some areas of wetlands and potential wetlands but these constraints do not significantly limit development potential. Other environmental features include forested areas and areas of steep slopes. While Plan policies call for preservation of quality forested areas, there are few regulatory requirements for doing so and efforts to preserve them would largely depend on their quality. As shown in Figure 11, areas of steep slopes are limited in the Study Area and do not pose significant development constraints.



The Broad Run and associated floodplains and tributaries comprise the biggest development constraint near the Route 606 Station.

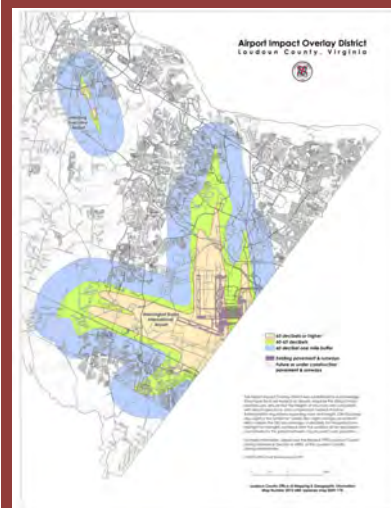
### ***Additional Considerations***

#### ***Airport Impact Overlay***

The Airport Impact (AI) Overlay District was established to protect Washington Dulles International Airport as an economic engine by ensuring land use compatibility.

The district recognizes the unique land use impacts of airports, regulates the siting of noise sensitive uses, ensures that the heights of structures are compatible with airport operations, and complements Federal Aviation Administration regulations regarding noise and height.

The County established the AI district boundaries on the 60 and 65 Ldn noise contours as well as an area that extends one (1) mile beyond the 60 Ldn contours in 1993. In Airport Noise Impact areas of Ldn 65 or higher, residential units are not be permitted. However, dwelling units and additions to existing dwellings may be allowed if they were permitted prior to establishing the AI district. Figure 6 depicts the AI district boundaries in the Study Area.



The Airport Impact Overlay district is intended primarily to limit development of noise sensitive uses within noise contours of current and planned aircraft flight paths (see Figure 6).

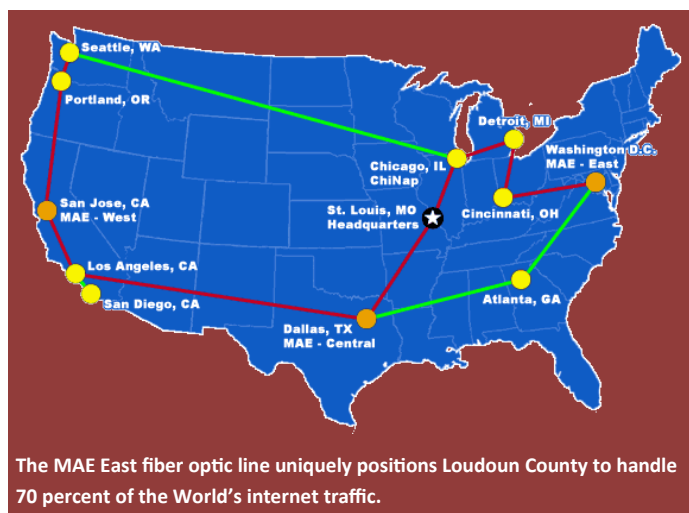
#### ***Parking Garages***

The County anticipates that three parking garages will be in operation prior to the start of Metrorail operations into Loudoun County. There will be one parking facility at the

Route 606 Metrorail Station with 1,965 parking spaces. A second parking facility will be located at Loudoun Station on the north side of the Route 772 Station with 1,433 spaces. The third station will be located at Moorefield Station on the south side of the Route 772 Station with 1,540 spaces. The exact financing, ownership, and operational structure for these parking garages is currently being finalized, but the County is committed to having these garages open for the start of Metrorail operations. The County has a website dedicated to information pertaining to these facilities which is listed in the resources list.

### Fiber Lines

The Study Area is home to the Metropolitan Area Exchange-East (MAE-East), a significant crossroads of fiber optic cable that provides large amounts of broadband capacity for Internet users. In addition, there is an extensive fiber optic network, which provides superior high-speed voice, video, and data transmission. High-speed fiber optics technology enables businesses, government, defense electronics, and others to transmit large amounts of data safely and securely. The fiber infrastructure within the Study Area is crucial to providing connectivity to other companies and networks worldwide, providing the area with a national market advantage. The MAE-East line is one of the primary reasons for the large number of data centers in the Study Area.



### Approved Projects

Figure 12 shows the major projects that have been approved since 2001 with a rezoning application. Some of these projects are currently under construction or partially built while others have seen no development activity.

#### ***Moorefield Station (ZMAP 2001-0003)***

The Moorefield Station rezoning application was approved in 2002. The property straddles the south side of the Dulles Greenway and includes a portion of the planned TOD area. The TOD portion of the property utilized the Planned Development—Transit Related Center (TRC) zoning district. This is the largest project currently planned in the Study Area. The project contemplates a mix of 6,000 residential detached, attached, and multi-family dwelling units and 9.75 million square feet of non-residential space. The property is approximately 582 acres in size and is located south of the Dulles Greenway (Route 267) and on the north side of Loudoun County Parkway (Route 607). The project includes an inner core, outer core, inner transit-supportive area, and outer transit-supportive area based on walkability and distance from the Metrorail Station.

The inner core consists of 69 acres and will have the most intense urban form allowing building heights up to or exceeding 100 feet and includes a 12 acre site dedicated to the County for transit-supportive uses. The outer core consists of 79 acres and surrounds the inner core. It represents the maximum reasonable distance that a person would walk to the transit stop. The Inner Transit Design Supportive Area consists of 244 acres and serves as a transitional area for much of the development separating other planned and developed suburban development from Moorefield Station. This area has the greatest amount of lower density residential dwellings. The Outer Transit Design Supportive Area consists of 98 acres and is the most physically separated portion of the project extending north and west of existing Ryan Road. The east and

west boundaries are buffered by existing vegetated stream corridors. The northern third of the Outer Transit Design Supportive Area is to be a dedicated use dedicated site of about 80 acres. This property is planned to accommodate natural stream corridors, limited park uses and allow for public schools. The remainder of the Outer Transit Design Supportive Area is to be developed with a variety of residential dwellings (detached, duplex, townhouse, apartments) and an urban retail center (with a grocery store anchor) and will include a homeowner's association recreation center.

### ***Loudoun Station (ZMAP 2002-0005)***

Loudoun Station straddles the northern side of the Dulles Greenway and is located within the planned TOD surrounding the future transit station. It was rezoned to PD-TRC and approved in 2003 for up to 1,514 multi-family residential dwelling units and 1.9 million square feet of office, hotel, theater and retail uses. There is some construction activity occurring at Loudoun Station and several retail spaces and residential units have already been occupied.

### ***Digital Loudoun (ZMAP 2011-0006)***

There are several data center buildings in the Study Area in the vicinity of the planned Route 772 Station. Digital Loudoun has developed many of these data center sites and ZMAP 2011-0006 was approved in 2012 to allow for additional data center buildings and an electrical substation. The rezoned site will have a total of four building envelopes for data centers which will supplement the six data center buildings that currently exist adjacent to the Loudoun Station development.

### ***Dulles Parkway Center II (ZMAP 2005-0041)***

Dulles Parkway Center is a 40.25 acre site on the southern side of the Dulles Greenway. The western most part of the project is within the planned TOD. It was rezoned to PD-TRC in November 2007 and will provide up to 624 multi-family residential units and 600,000 square feet of office and retail uses. Some residential, retail, and hotel development has already occurred along Centergate Drive but the majority of land planned for office space has not been developed.

### ***West Dulles Station (ZMAP 2005-0021)***

West Dulles Station was approved in June 2006. The rezoning consists of 28.45 acres which were rezoned to PD-IP. The proposal calls for up to 485,760 square feet of flex and office uses. In addition, the proposal would accommodate 1,895 parking spaces. No development has occurred on the site since its approval.

### ***Dulles World Center (ZMAP 2008-0018)***

Dulles World Center was approved in March 2011 concurrent with the adoption of the Route 28 Corridor Plan. Subsequently, in January 2014, a concept plan amendment was approved to modify the phasing and accelerate some residential development. The project consists of 81.68 acres and was rezoned to the Planned Development – Town Center zoning district. A total of 4.1 million square feet of non-residential development and 1,265 residential units are contemplated.

## **Revised General Plan and Zoning**

### **Revised General Plan Background**

The Revised General Plan is the foundation of the County's Comprehensive Plan adopted by the Loudoun County Board of Supervisors. The basic purpose of a Comprehensive Plan is established in the Code of Virginia, Volume 3A, paragraph 15.2-2223, which states: "The Comprehensive Plan shall be made with the purpose of guiding and accomplishing a coordinated, adjusted, and harmonious development of the territory which will, in accordance with present and probable future needs and resources, best promote the health, safety, morals, order, convenience, prosperity, and general welfare of the inhabitants."





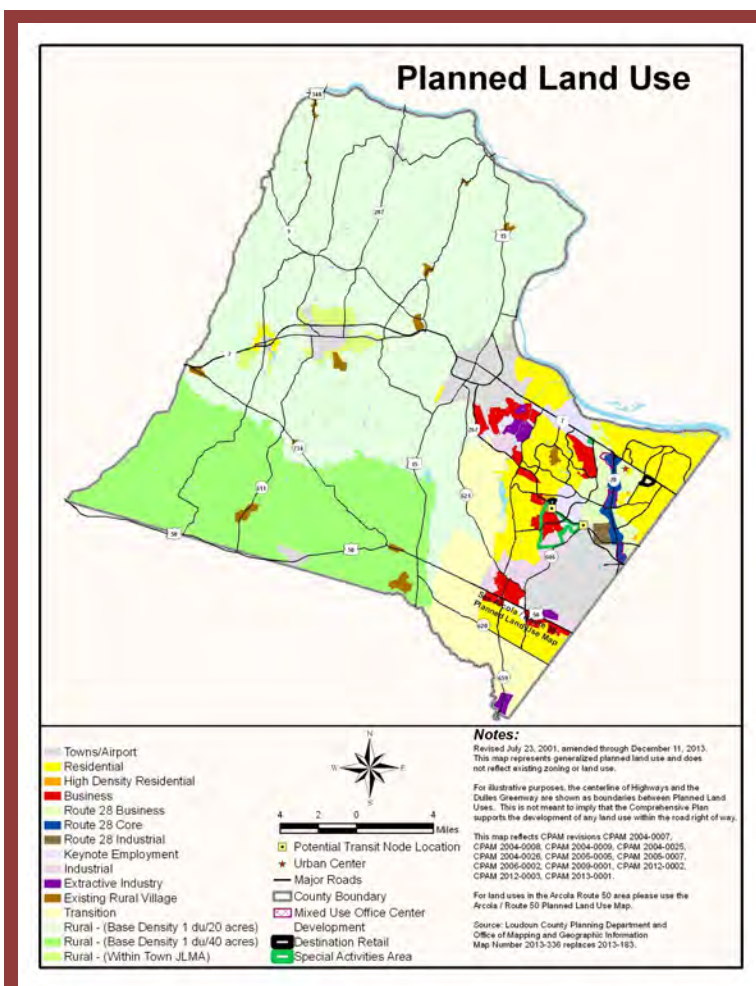
The County has sought to offset the “costs” of residential development by encouraging a fiscally favorable balance between residential and non-residential development. The Plan supports phasing growth based on the availability of adequate public facilities and distributing the costs of growth more equitably. Over the years and to this end the County has implemented an integrated approach to fiscal and land use planning. The strategy begins with the Comprehensive Plan, which includes the Revised General Plan, Countywide Transportation Plan and associated documents. The Plan establishes the development potential of the County by planning the residential and non-residential uses of the land to ensure that Loudoun County remains a well-served community with a high quality of life and an economic balance to allow an affordable tax rate.

State case law envisions strong links between a Comprehensive Plan, zoning and subdivision regulations and the capital improvements program that establishes the location, financing and timing of local public facilities (Section 15.2-2239 et. Seq. Va. Code Ann.). This integrated planning approach is expected to provide a growth-management strategy that will sustain local jurisdictions as they grow.

There are several distinct components of the Revised General Plan that provide the policy guidance for land development decisions. For summary purposes, Planned Land Use in the Study Area can be distilled down to four specific governing areas of the Plan providing a range of options for development served by Metrorail. First, the Planned Land Use Map divides the County into several distinct community types ranging from rural to industrial. Each of the community types have a specified land use mix and set of policies that are used to evaluate land development proposals. Within portions of the Study Area, the Route 28 Corridor Plan, Transit Node policies, and Special Activity Area designations provide additional development options and policies for certain areas as shown in Figure 8. These policies within the Plan recognize the strategic location of the planned Metrorail Stations and unique aspects of the Route 28 Corridor in order to provide development opportunities tailored to infrastructure in place.

### Planned Land Use

The Revised General Plan Planned Land Use Map is shown in Figure 7. Figure 8 shows detail of the Planned Land Use within the Study Area. The Planned Land Uses generally found within the Study Area include High-Density Residential, Business, Keynote, and Industrial. Table 1, on the following page summarizes the purpose of designation and provides permitted densities. Within the Route 28 Corridor, there are additional Planned Land Use designations also discussed below and shown in Table 1. Specific policies related to transit nodes that work in conjunction



The Revised General Plan Planned Land Use Map is the foundation for land planning decisions in the County (see Figures 7 and 8).



**Table 1—Study Area Planned Land Use Designations**

Planned Land Use	Definition/Typical Uses	Density		
Residential	Mixed-type housing neighborhoods. Allows for mix of residential supportive uses.	Residential: 1.0 to 4.0 dus/acre		
High-Density Residential	Single-family attached and multi-family housing. Allows for mix of residential and supportive cases.	Residential: 8.0-16.0 dus/acre 8.0-24.0 dus/acre in Toll Road corridor		
Town Center	A “downtown” or “Community Core”. Mixed-use with emphasis on pedestrian movement (vs. vehicular).	Res: 8.0-16.0 dus/acre Non-Res. to 0.4 FAR		
Urban Center	Intensive, large-scale mixed-use. Rectilinear layout with public greens & squares with landscaped streets & pedestrian-oriented buildings.	Phase w/Roads w/Bus w/Rail	<u>Res. dus/acre</u> 8.0-16.0 to 24.0 to 24.0	<u>Non-Res. FAR</u> to 0.4 0.4-1.0 1.0-2.0
Transit Node: Transit-Oriented Development (TOD)	Compact mixed-use development at densities to support transit. Streetscapes and building frontages that are pedestrian scale.	Phase w/Roads w/Bus w/Rail	<u>Res. dus/acre</u> 8.0-24.0 to 32.0 to 50.0	<u>Non-Res. FAR</u> to 0.6 0.6 to 1.0 1.0 to 2.0
Transit Node: Transit-Related Employment Center (TREC)	Compact employment-based development at densities to support transit. Streetscapes and building frontages that are pedestrian scale. No residential component, where limited by airport Ldn.	Phase w/Roads w/Bus w/Rail	<u>Res. dus/acre</u> N/A	<u>Non-Res. FAR</u> to 0.6 0.6 to 1.0 to 2.0 (2.0 net cap)
Keynote Employment	100% office or research & development centers supported by ancillary retail & services. Corporate headquarters/premiere office development, heavily landscaped and visually impressive.	Res: N/A Non-Res. FAR: 0.40 to 1.0		
Regional Office	Mixed-use development supports a variety of office with some high-density residential and supportive services and retail.	Res: 8.0-24.0 dus/acre Non Res. FAR 0.40-1.00		
Light Industrial	Lowrise (primarily 2-story or less) development, includes flex/warehouse, small-scale manufacturing. Compatible with office commercial and residential-no outdoor storage or emissions.	Res: 8.0-24.0 dus/acre Non-Res. FAR 0.30-0.40		
General Industrial	Labor intensive industrial & commercial uses. Buffered and separated from residential. Outdoor storage, noise, & emissions.	Res: N/A Non-Res. FAR: 0.30-0.40		



**Table 1 Continued—Study Area Planned Land Use Designations**

Planned Land Use	Definition/Typical Uses	Density
Route 28 Core:	Office Clusters; Mixed Use Office Centers	
Route 28 Office Cluster	Mix of highly integrated uses and employment supportive uses; encourage vertically mixed buildings with commercial storefronts on ground level; no residential uses allowed; may include custom campuses; predominately Office, limited Commercial Retail and Services; Public and Civic uses	Between 0.6 and 1.0 FAR contingent on transportation improvements
Route 28 Mixed-Use Office Center (MUC)	Mix of mutually supportive uses including: business, retail, restaurants, personal services, hotels, for-sale and rental housing, civic, public, cultural and entertainment uses; 27/7 amenity-rich developments; vertically integrated mixed use buildings; “urban feel” with pedestrian-oriented building facades; high-density, multi-family residential dwellings only.	1.0 FAR up to 1.5 FAR with incentives for the northern and central MUC areas; 1.5 FAR up to 2.0 FAR with incentives for the southern MUC area
Route 28 Business	Low to mid-density Office and Flex uses; includes secure office campuses and R&D; supportive Commercial Retail and Services up to 10% of FAR; no residential uses; no Flex adjacent to major roadways; no outdoor storage; Large scale Public and Civic uses allowed.	Between 0.4 and 1.0 FAR; lower FARs in Flex developments
Route 28 Industrial	Up to 100% Heavy Industrial, Light Industrial, Flex uses with supportive Commercial Retail and Services limited to 10% of FAR; Includes: warehousing, distribution, manufacturing; outdoor storage of materials and equipment allowed.	Between 0.2 and 0.4 FAR



with these Planned Land Uses are also discussed. Each of these designations have policy guidance for a specific land use mix. The County reviews all legislative applications against the policies of the Revised General Plan. County Staff provide recommendations to the Planning Commission and Board of Supervisors based on the extent to which a project meets the policies of the Revised General Plan.

There are several areas of high density residential development with 8 to 16 dwelling units per acre in close proximity to the planned Route 772 Metrorail Station.



### High-Density Residential

High-Density Residential uses accommodate a scale of human activity that is needed to develop viable, mixed-use communities and to implement key County objectives including the development of mass transit, provision of affordable housing, preservation of open space, and efficient use of public facilities and services. High-Density Residential uses are planned in a limited number of locations that include designated areas along the Dulles Greenway, within the County's Urban Center, in Town Centers, and as a component of mixed-use Business land use areas. High-density residential areas are intended to comprise between 8 and 24 dwelling units per acre with the highest densities in the Dulles Greenway corridor where transit is anticipated.

Land Use Category	Minimum Required	Maximum Permitted
a. High Density Residential	40%	60%
b. Office, Light Industrial	0%	20%
c. Public & Civic	10%	No Maximum
d. Public Parks & Open Space	30%	No Maximum

Revised General Plan land use mix guidance for High-Density Residential Communities

### Business

Business land use policies address the location and character of large-scale office and light-industrial uses in the Suburban Policy Area. The County encourages a mix of uses in most of its office and light-industrial business developments. In addition to offices, Business land uses generally may feature housing and/or commercial/retail uses, and all of the uses have a component of public/civic uses and parks and open space. The mix of uses is intended to create an environment where individuals not only can work, but where they can live and have convenient access to services, shops, and recreation. The Business land use designations envision development as Regional Office and/or Light Industrial Communities.

Land Use Category	Minimum Required	Maximum Permitted
a. High Density Residential	15%	25%
b. Regional Office	50%	70%
c. Commercial Retail & Services*	0%	10%
d. Light Industrial/Flex	0%	20%
e. Overall Commercial & Light Industrial (c plus d)	0%	20%
f. Public & Civic	5%	No Maximum
g. Public Parks & Open Space	10%	No Maximum

Revised General Plan land use mix guidance for Business Communities (Regional Office Communities)



Land Use Category	Minimum Required	Maximum Permitted
a. High Density Residential (outside noise impact area)	0%	25%
b. Commercial Retail & Services	0%	10%
c. Regional Office	0%	40%
d. Overall Business Uses (b & c combined)	0%	40%
e. Light Industrial/Flex	45%	85%
f. Public & Civic	5%	No
g. Public Parks & Open Space	10%	No

Revised General Plan land use mix guidance for Business Communities (Light Industrial Communities)

### Keynote

Keynote Employment Centers are envisioned as 100-percent premier office or research-and-development centers supported by ancillary retail and personal services for employees. They do not envision a residential component. Keynote Employment centers have high visibility along major corridors, their structures accented with heavily landscaped greens and tree-lined boulevards, and reflect the County's growing prominence as a global crossroads for business. Keynote Employment Centers house headquarters for businesses such as America Online, Raytheon, and Verizon. The preferred location for Keynote Employment Centers is along Route 7 and the Dulles Greenway.



Keynote employment uses outside the Route 28 Corridor.

Land Use Category	Minimum Required	Maximum Permitted
a. Regional Office	70%	85%
b. Commercial Retail & Services	0%	10%
c. Public & Civic	5%	No Maximum
d. Public Parks & Open Space	10%	No Maximum

Revised General Plan land use mix guidance for Keynote Communities



### Industrial

Industrial Centers are intended to accommodate the continued operation and expansion of major industrial uses which represent a significant portion of the County's tax base and employment. This land use designation provides a degree of protection for industrial uses from other incompatible land uses. Primary land uses in these industrial areas are General Industry and Heavy Industry. The majority of industrial communities are focused near Washington Dulles International Airport.

General Industrial uses are predominantly labor-intensive industrial and commercial uses. Their outdoor storage requirements, noise levels, and emissions present difficult design issues and make them incompatible with residential development. Associated activities also make them incompatible with residential and other business areas. Such developments are best located away from major roads, accessed from within an industrial park, and limited to a minor portion of a larger development.

Heavy Industry is not conducive to mixed-use development. Heavy industrial sites generally are limited to land within the Airport Impact Overlay Zone or where residential development is otherwise undesirable. Quarries are an example of heavy industrial uses in the County. The County requires that industrial uses provide adequate buffers and protection to mitigate negative impacts on surrounding uses.

### **Route 28 Corridor Plan**

The *Route 28 Corridor Plan* was a March 2011 amendment to the Revised General Plan. Policies in the Plan build upon the significant amount of data and public input gathered through various Route 28 Corridor activities and initiatives since January 2008. These efforts included public input sessions, interviews, targeted questionnaires, and research to develop several reports, including the Route 28 Business Outreach Results Report; Belfort Park Task Force Final Report; the Route 28 Tax District Existing Conditions Report; and the Route 28 Corridor Analysis of Development Potential for Class A Office Space.



Industrial uses in the Mercure Industrial Park along Route 606

Land Use Category	Minimum Required	Maximum Permitted
a. Residential	0%	0%
b. Commercial Retail & Services	0%	10%
c. Office	0%	20%
d. Light Industrial	0%	20%
e. Industrial	70%	90%
f. Public & Civic	0%	No Maximum
g. Public Parks & Open Space	10%	No Maximum

Revised General Plan land use mix guidance for Industrial Communities



The Route 28 Corridor is a major highway in the eastern portion of the Study Area. The corridor has been planned for major employment uses on either side of the roadway.



The basis for the Route 28 Corridor Plan stems from the desire to create more opportunities for Class A office space and other employment generating uses given the proximity of the corridor to a major international airport.

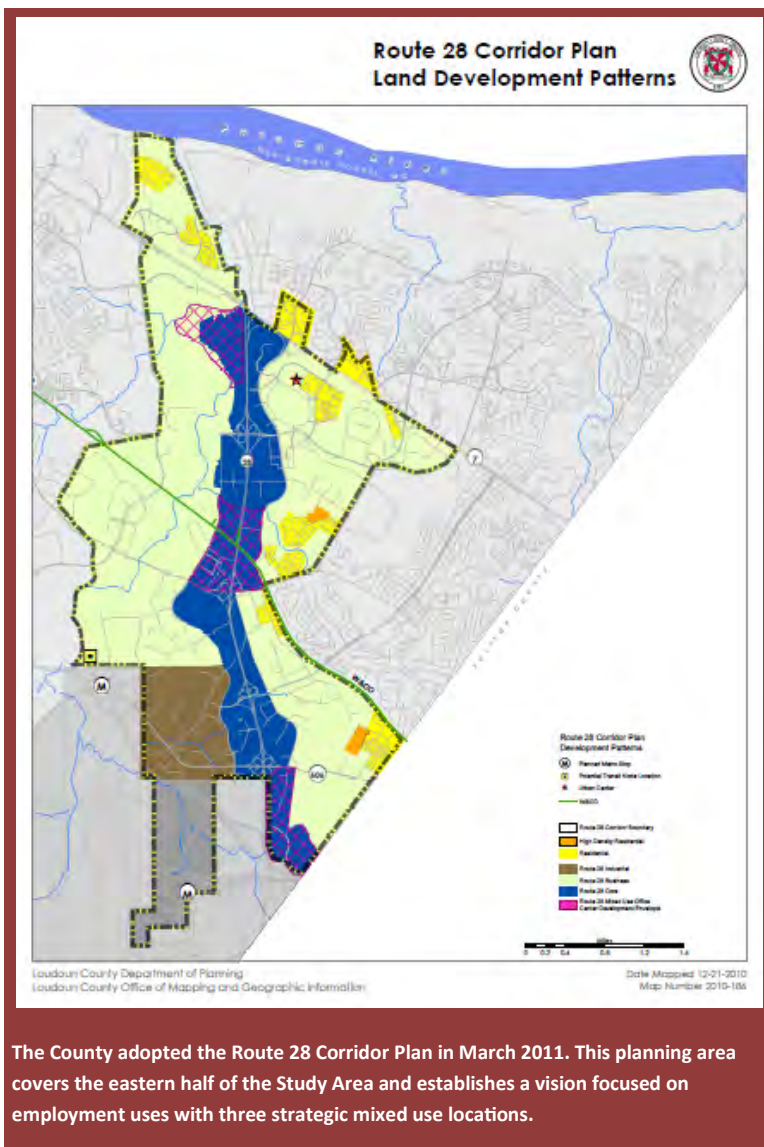
Landowners within the corridor recognized that timely transportation improvements were logical and vital to its economic development. As such, the Route 28 Highway Improvement Transportation District ("Route 28 Tax District") was formed in 1987 in partnership with Fairfax County to help fund transportation improvements including conversion of Route 28 into a limited access highway. However, due to statutory requirements of the Route 28 Tax District, property owners are vested in zoning districts in place at the time the District was formed (see Zoning discussion below). This results in three different zoning ordinances that govern the district and an unpredictable development pattern. A major goal of the Route 28 Corridor Plan was to identify incentives to encourage property owners to convert to the most recent zoning ordinance.

The result of the Plan was development of policy language and associated maps that provide a specific plan and vision for the Route 28 Corridor. Other policies of the Comprehensive Plan continue to apply as appropriate.

The Route 28 Corridor Plan promotes the growth of the commercial tax base, helps improve the revenue balance between commercial and residential, offsetting the greater costs of services for residential development, helping to meet or exceed the ability of the County to pay Route 28 Tax District bonds, and relieving the tax pressure on County residents by maintaining an affordable real property tax rate.

The County envisions the Route 28 Corridor as an airport-anchored gateway into Loudoun County offering a positive and welcoming business environment that supports significant job growth and economic activity in varied settings. The County also envisions the corridor evolving into a premier location for regional, national, and international businesses with a high-quality image that offers employees vibrant centers of activity and highly-integrated pedestrian and transit-friendly employment developments. This vision reinforces the County's commitment to the continued commercial growth of the corridor that in turn contributes to the overall fiscal health and economy of the County.

Implementation efforts for the Route 28 Corridor Plan are ongoing. On December 4, 2013 the Board of Supervisors approved a zoning amendment that established new optional zoning districts for the Route 28 Corridor that provide incentives to convert to the most recent zoning ordinance. The County is currently undertaking efforts to map these



optional zoning districts consistent with Planned Land Uses areas in the Route 28 Corridor Plan. Additional discussion of Route 28 zoning is provided below.

### Transit Nodes

The two Transit Nodes located along the Dulles Greenway are key land use components of the Suburban Policy Area associated with the planned Metrorail Service. The two nodes are very different, in terms of their function and design, and as such are denoted as a Transit-Oriented Development (TOD) and a Transit-Related Employment Center (TREC).

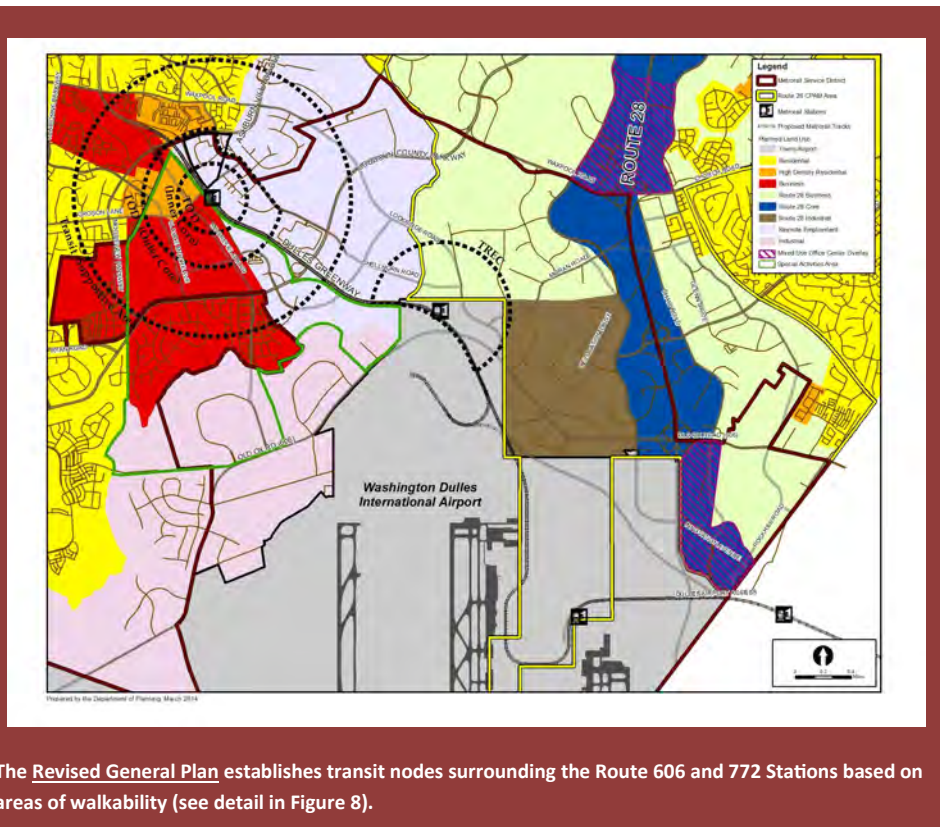
The County expects that property owners will work together with the public sector (the County, Washington Metropolitan Area Transit Authority, Metropolitan Washington Airport Authority, State Department of Rail and Public Transportation, etc.) to ensure that adequate transit facilities and connections for all modes are in place to support maximum use of the transit system. This type of joint public-private partnership is required in the planning of the Transit Nodes, and all property owners are encouraged to work together in designing a unified development plan for the Transit Nodes.

The purpose of Transit Nodes is to limit sprawl and to reduce public costs; to provide the “critical

mass” needed to support bus and rail transit; to provide a development alternative that promotes the separation of automobile-oriented land uses from transit-oriented land uses; and to maintain the efficient operation of the Dulles Greenway. The two Transit Nodes are both transit-oriented, but serve several different functions.

The TREC will be located to the north of the Dulles Greenway, north and west of the Route 606 interchange and the Dulles North Regional Transit Center, a regional park-and-ride facility. Because of the constraints of the Dulles Airport 65 Ldn Land the Regional Transit Center, the TREC is planned for concentrated employment use or Special Activity use without a residential component. This location is also envisioned to remain a major transit hub in the County.

The other Transit Node is planned as a TOD consisting of a mix of high-intensity land uses ranging from high-density residential uses, regional offices, entertainment and cultural centers, and other business and support services. The TOD straddles the Dulles Greenway between the Loudoun County Parkway and Route 772 interchanges and comprise a mixed-use development.



The Revised General Plan establishes transit nodes surrounding the Route 606 and 772 Stations based on areas of walkability (see detail in Figure 8).

### Transit-Oriented Development (TOD)

Land straddling the Dulles Greenway at the Route 772 Station is envisioned as the site of a compact Transit-Oriented Development that will have densities to support a balanced mix of jobs, transportation, and high-density housing. The TOD is intended to provide pedestrian-scale development with a mix of residential, commercial, public, and employment uses. Pedestrian circulation is envisioned to be enhanced by short blocks arranged in a rectilinear grid-street pattern. The TOD is planned to have an “urban feel” with pedestrian-oriented building facades, ground-floor shops, and distinctive public spaces.

The TOD is comprised of an inner core (1/4-mile radius) and an outer core (1/2-mile radius). The inner core should have the most “urban-feel” with a vertical mix of uses, such as ground-floor shops and upper story residences, and public gathering places. The TOD is planned to encompass an area no greater than that defined by the 1/2-mile radius from the TOD edge to the transit stop. Land uses will diminish in intensity as they increase in distance from the transit stop, although they will continue the same grid pattern. The TOD will be surrounded by a transit-supportive area, providing for a complementary density and design transition from the intense TOD to the less-intense development outside the TOD.

Density within the TODs is phased according to availability of transit service. The density for the TOD when served only by roads only is up to 16 dwelling units per acre for residential development and up to a 0.6 Floor Area Ratio (FAR). When bus service and facilities are planned, scheduled, designed and fully funded to serve the TOD, residential densities may increase to 32 dwelling units per acre and a non-residential FAR up to 1.0. When rail transit and facilities are planned, scheduled, designed, and fully funded to serve the TOD, residential densities can increase above 32 dwelling units per acre, up to 50 dwelling units per acre, and a non-residential FAR between 1.0 and 2.0 is permitted.

As discussed above, the County has already approved the Loudoun Station, Moorefield Station, and Dulles Parkway Center rezonings which are within the TOD for the Route 772 Station. These projects are anticipated be developed in accordance with the phasing referenced above.



Initial phases of development at Loudoun Station that will part of the Route 772 TOD. Higher densities closer to the Metrorail stop are anticipated in later phases.



### Transit-Related Employment Center (TREC)

A Transit-Related Employment Center (TREC) or Special Activity destination is planned north and west of the Route 606 Station. Originally, in the 1995 Toll Road Plan, the Route 606 Station was designated as a Regional Transit Center. However, with the adoption of the 2001 Revised General Plan the vision for the Route 606 Station was expanded and the current TREC policies were added. The TREC is planned for concentrated compact employment use and may be appropriate for a special activity such as a sports stadium or exhibition facility. The TREC is envisioned to encompass an area no larger than 1/2-mile north of the station. This area is limited by the Dulles Airport property and the existing transit facility to the southeast, and the Route 606/Dulles Greenway interchange to the south.

Densities envisioned in the TREC are dependent on the availability of transit services. With roads only, the TREC supports non-residential densities up to a 0.6 FAR. With bus and rail transit facilities, densities in the TREC are envisioned to reach non-residential FARs of 1.0 and 2.0 respectively. The highest densities also require a range of roadway improvements to ensure that access to the transportation facilities is not encumbered.

In general, FARs west of the Broad Run are limited to 0.4, but higher densities can be considered when acceptable levels of services are demonstrated on nearby roadways, environmental impacts are minimized, access to the transit center is not hampered, and pedestrian linkages are provided.

Land uses and densities in the TREC were planned with careful consideration of the constraints of the Dulles Airport 65 Ldn, constraints imposed by the Federal Aviation Administration, environmentally sensitive floodplain areas associated with the Broad Run, and the regional park and ride facility. Any development in the TREC is envisioned to reflect these considerations.



Areas near the Route 606 Metrorail Station (TREC) are currently developed with agricultural uses.

### ***Special Activity Uses***

Special Activity uses are single uses or activities that may not be compatible with the mixed-use communities in the Suburban Policy Area due to their scale. Special Activity uses include professional sports stadiums, conference facilities, and theme parks. While economic benefit would be derived from the use and from ancillary development spurred by its existence, the Special Activity use substantially could affect surrounding land uses.

Loudoun County's unique amenities increase its potential to attract Special Activity uses that would serve the region. The Washington Dulles International Airport, the Dulles Greenway, and future transit make certain areas within the Suburban Policy Area especially attractive.

The County encourages the development of Special Activity uses in designated areas and will evaluate Special Activity use proposals on a set of criteria to ensure the selection of the best site and the mitigation of potentially adverse impacts. The Land Use Map identifies areas for possible Special Activity use.

## Zoning Districts

There are 51 different zoning district designations in the Loudoun County Zoning Ordinance. This section summarizes the stated purpose of the zoning districts most commonly found in the Study Area and most appropriate for future rezonings within the Study Area. Residential zoning districts are not discussed but the zoning ordinance does contain several residential zoning districts for various densities. Figure 13 provides the existing zoning map for the Study Area.

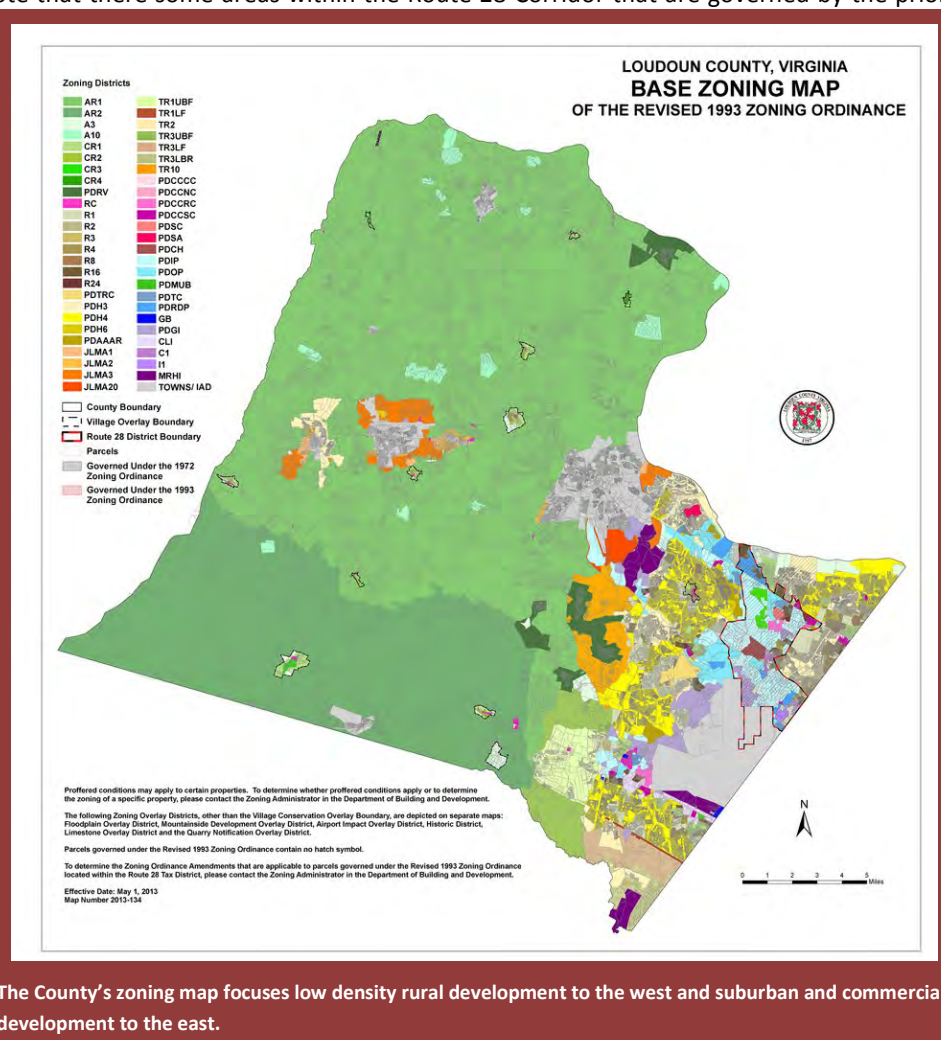
Loudoun County's current Zoning Ordinance was written in 1993 with numerous amendments made since its original adoption. It is also important to note that there some areas within the Route 28 Corridor that are governed by the prior 1972 zoning ordinance due to formation of a Tax District which protects property owner's vested rights. Those property owners have an option to convert to the current 1993 Zoning Ordinance. For summary purposes, the discussion below considers only the 1993 Zoning Ordinance but it should be noted that uses and bulk requirements vary somewhat between the 1993 and 1972 ordinances. The general intent of the district is the same between 1972 and 1993.

The County is also working to establish optional overlay districts within the Route 28 Corridor. The optional overlay districts would provide an alternative method of development that allows higher Floor Area Ratio (FAR) and lot coverage, along with process streamlining and other regulatory incentives coupled

with design controls and provision of amenities. This initiative, which is in the final phase of implementation, is summarized on the Route 28 Corridor Zoning Ordinance Update webpage.

### PD-TRC (Planned Development – Transit Related Center)

The PD-TRC district is intended to provide a compatible mixture of commercial, cultural, institutional, governmental, recreational, and high density housing uses in compact, pedestrian and transit-oriented developments and transit-designed supportive areas serving as focal points for nearby related activity centers and residential areas. Planned rail and bus facilities are integral to this mixed-use concept and density increases are considered with availability of roads, bus and



rail service. Higher intensity, mixed-use development projects under this zoning district are intended to promote linkage of employment and residential uses.

Specific objectives of such districts include a pedestrian-scale development; a town center at an intensity of development that can be supported by multi-modal transportation and other services; pedestrian and bicycle connectivity; the use of mass transit to reduce the number of peak hour vehicle trips; high-quality design; and well-configured plazas, squares, greens, landscaped streets, and parks woven into the pattern of the transit-oriented development and dedicated to collective social activity, recreation, and visual enjoyment.

Uses permitted by right in the PD-TRC district include residential, convenience stores, hotels, offices, restaurants, and retail sales. Larger facilities like colleges, performing arts centers, and hospitals are permitted by special exception. With rail service, FARs of up to 2.0 are permitted in the PR-TRC district. Otherwise FARs of up to 0.6 and 1.0 are permitted without bus and with bus service respectively.

#### *PD-TREC (Planned Development – Transit Related Employment Center)*

The PD-TREC District was established to provide for a mix of compatible uses in a high-density, pedestrian-oriented, transit-oriented, and compact employment center or Special Activity center. The district regulations are designed to accommodate high-intensity employment or a Special Activity use and supporting uses appropriate to a district location that is: (1) within the 65 Ldn noise contours associated with Dulles Airport, (2) impeded by significant floodplain (Broad Run) and highway right-of-way (Dulles Greenway, Routes 606 and 789), and (3) adjacent to planned rapid bus and rail transit lines.

Specific objectives of this district include providing the opportunity for a high intensity mix of development that is supportive of and served by mass transit service; encouraging development that is compatible within the 65 Ldn noise contours of Washington Dulles International Airport; providing for pedestrian, bicycle and vehicle connections between and within the development and nearby transit; reducing the number of peak hour vehicle trips; providing for a mix of supporting commercial retail and service uses to serve the shopping and service needs of district employees, visitors, and commuters; encouraging the development of public spaces; ensuring high quality design; taking advantage of the future rail connection to the Washington Dulles International Airport; and taking advantage of the viewshed of the Washington Dulles International Airport. Currently, the PD-TREC district is not mapped anywhere in Loudoun County because property owners must rezone to the district as part of a rezoning application.

In general, the PD-TREC district permits the same urban downtown type uses as the PD-TRC district exclusive of residential dwellings. FARs of up to 2.0 are permitted with rail service.

#### *PD-OP (Planned Development – Office Park)*

The PD-OP district is intended primarily for administrative, business, and professional offices and necessary supporting accessory uses and facilities. For example, retail uses like banks, fitness centers, printing facilities, and day-care centers are permitted by right in addition to offices. Other uses like restaurants, hotels, and dance studios are permitted with special exceptions. The district is intended to be designed with a park-like atmosphere and environmentally sensitive design to accommodate and complement existing natural features including extensive landscaping, low ground coverage by buildings, buildings of moderate height, and careful attention to such aesthetic considerations as location and size of signs, lighting, parking and service areas and the like. The PD-OP district permits a by right FAR of 0.6 and a 2.0 with special exception.



### *PD-IP (Planned Development - Industrial Park)*

The PD-IP district is established for light and medium industrial uses, office uses, and necessary supporting accessory uses and facilities, designed with a park-like atmosphere to complement surrounding land uses by means of appropriate siting of buildings and service areas, attractive architecture, and effective landscape buffering. Uses like distribution facilities, offices, wholesale trade, banks, printing services, and carry-out restaurants are permitted by right. The PD-IP district permits a by right FAR of 0.4 and a 0.6 with special exception. Special exception uses include car washes, automotive service stations, and contractor service areas.

### *PD-GI (Planned Development - General Industry)*

This district is established primarily for medium industrial uses with a public nuisance potential, and necessary accessory uses and facilities, built in a well coordinated and attractive manner to be compatible with surrounding land uses. By right uses in the PD-GI district include distribution facilities, heavy equipment sales and repair, manufacturing, and storage facilities. High intensity uses like, junk yards, bulk fuel storage, and concrete mixing plants are special exception uses. The maximum FAR in the PD-GI district is 0.4.

### *PD-TC (Planned Development - Town Center)*

The PD-TC district was established to provide for a compatible mixture of commercial, cultural, institutional, governmental, and residential uses in compact, pedestrian oriented, traditional town centers. The PD-TC district is intended to be used in specific areas consistent with the Comprehensive Plan such that development can serve as a focal point for surrounding residential areas.

Specific objectives include dwellings, shops, and workplaces generally located in close proximity to each other; generally rectilinear patterns of streets and blocks; a hierarchy of public and/or private streets with facilities for automotive vehicles, public transit, bicycles and pedestrians; well configured public spaces; civic buildings for assembly, or for other civic purposes, that act as landmarks, symbols, and activity centers for community identity; and on-street parking and centralized parking facilities to collectively support principle uses in the Town Center.

Uses permitted by right in the PD-TC district include restaurants, pharmacies, banks, dance studios, and offices. Special exception uses include hospitals, hotels, and automotive service stations. There are no FAR limitations in the PD-TC zoning district.

## **Transportation**

Loudoun County is actively engaged in expanding and enhancing its transportation network. Several roadway improvement projects are underway and additional improvements are being identified and accelerated on a continuous basis. For the last two years, the Board of Supervisors has also dedicated \$0.02 of the tax rate to fund missing links in the transportation network.

While there are several key documents guiding transportation improvements in the County, the dynamic state of transportation planning has resulted in even the most recent documents becoming somewhat dated, especially as they relate to planning around the proposed rail stations. Current transportation documents include the 2010 Countywide Transportation Plan (CTP), 2011 Loudoun County Transit Development Plan, and the Bicycle & Pedestrian Mobility Master Plan. The CTP is currently being updated to reflect changes to the planned roadway network including some roadways in the Study Area.





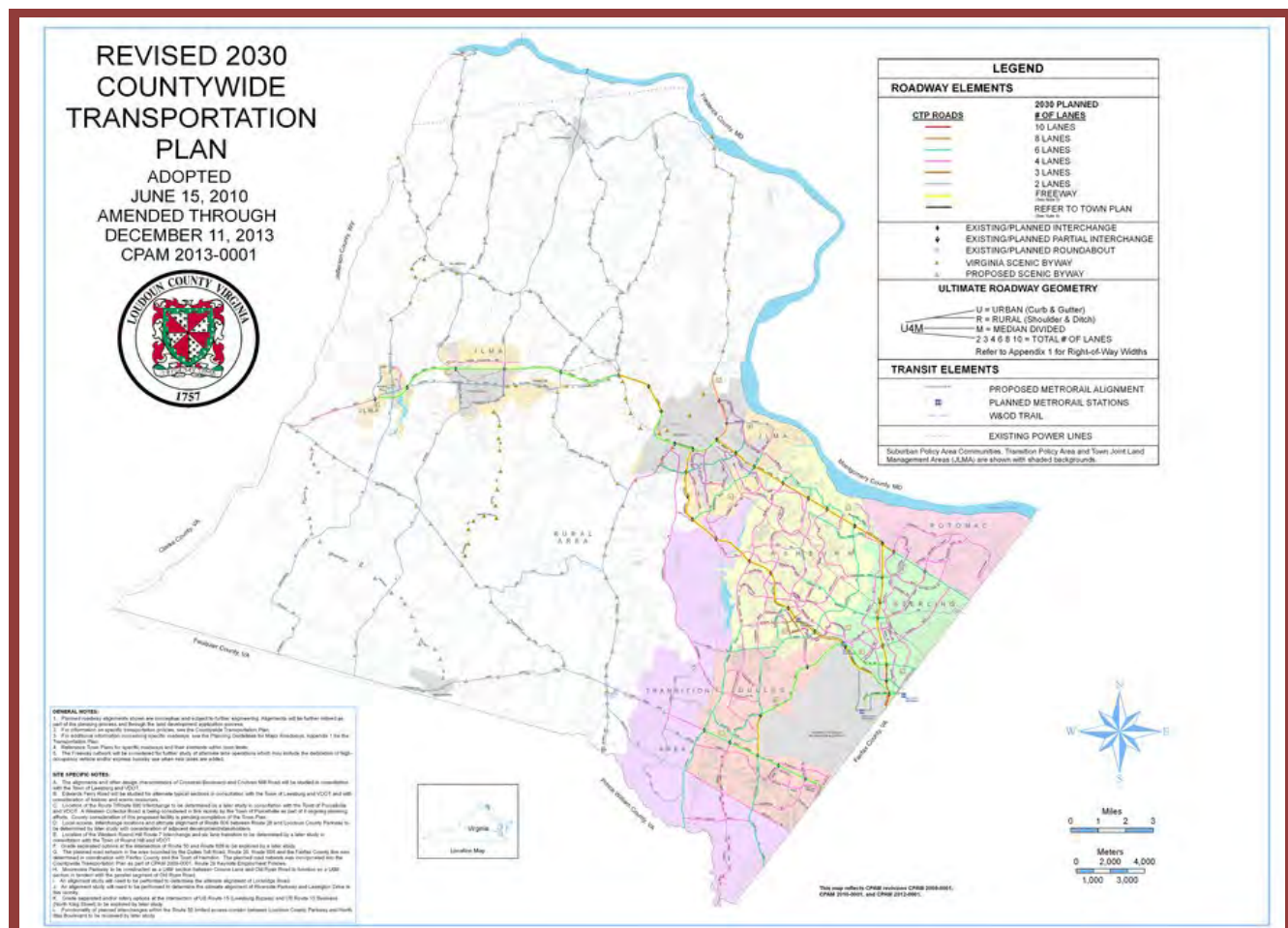
## 2010 Countywide Transportation Plan

The 2010 Countywide Transportation Plan (CTP) is a companion document to the Revised General Plan. It serves as a guide for future transportation infrastructure investment to be financed by Federal, State, and local dollars as well as private sector contributions.

### Planned Improvements

A number of Metrorail-Related road improvements in the Dulles Greenway (VA Route 267) Corridor are contemplated by the CTP. These improvements would complete the planned road network between and proximate to the two planned Metrorail Stations along the Dulles Greenway at Route 606 and at Route 772 (the planned Metrorail extension into Loudoun County is discussed in greater detail in Chapter 3 of the CTP). It is anticipated that these roadways will be constructed in conjunction with future development in the area. Among the planned road improvements in this area are:

1. Widening of the Dulles Greenway (VA Route 267) to eight lanes from the main toll plaza westward
2. Construction of Lockridge Road (VA Route 789 Extended) from the vicinity of the current Dulles North Transit Center at the intersection of Lockridge Road (VA Route 789) and Moran Road (VA Route 634) (site of the future Route 606 Metrorail Station) northwest across Broad Run and Loudoun County Parkway (VA Route 607) to



The Countywide Transportation Plan sets planned road configurations for major roadways in the County. Figure 14 provides the CTP roadway network for the Study Area.

Waxpool Road (VA Route 625)/Faulkner Parkway/Broadlands Boulevard (VA Route 640) (Note: Planned updates to the CTP may affect this recommended improvement.)

3. Completion of Croson Lane (VA Route 645) as a continuous four-lane roadway between Belmont Ridge Road (VA Route 659) and the Moorefield Station development
4. Construction of the Greenway Transit Connector within the Moorefield Station and Loudoun Station developments (site of the future Route 772 Metrorail Station) between Moorefield Boulevard and Shellhorn Road (VA Route 643), including a bridge over the Dulles Greenway (VA Route 267) (Note: Planned updates to the CTP may affect this recommended improvement.)
5. Construction of Moorefield Boulevard within the Broadlands South and Moorefield Station developments between Mooreview Parkway (VA Route 2298) and Loudoun County Parkway (VA Route 607) (opposite Westwind Drive (VA Route 645 Extended))
6. Completion of Claude Moore Avenue within the Moorefield Station development from Old Ryan Road (VA Route 772) (opposite the Greenway East-West Connector (Wynridge Drive)) to Loudoun County Parkway (VA Route 607)
7. Construction of the Greenway Loop Road from Lockridge Road (VA Route 789 Extended) over the Dulles Greenway (VA Route 267) and across Loudoun County Parkway (VA Route 607) through the Dulles Parkway Center development to Moorefield Boulevard in the Moorefield Station development.

Figure 14 provides the 2010 Countywide Transportation Plan Map for the Study Area and demonstrates the proposed roadway network serving the planned Metrorail Stations. It should be noted that minor revisions to the CTP are currently proposed to facilitate relocation of the transit connector bridge over the Dulles Greenway near the Route 772 Station. In addition, the County has initiated a Plan amendment to extend alignment of Prentice Drive to Loudoun County Parkway to replace the Lockridge Road alignment currently shown on the CTP.

### ***Transit***

The County is actively engaged in planning for transit around and to the Metrorail Stations. Chapter 3 of the 2010 Countywide Transportation Plan pertains to Transit and Other Mobility Options. Additional transit planning is provided in the November 2011 Loudoun County Transit Development Plan and July 2013 Transportation Prioritization Study. In addition, the Board of Supervisors participated in a “Transit Summit” on March 10, 2014 to further guide transit planning in the County.

In general, the CTP provides general guidance for transit planning and other Travel Demand Management (TDM) and recognizes the Route 606 and Route 772 Stations as transit nodes. The CTP also discusses bus service and the extent to which some bus service can be replaced by Metrorail Service.

With regard to Metrorail Service specifically, the CTP states that the Dulles Corridor Metrorail Project is one of the County’s and Region’s priority transportation projects. Phases II and III of a three phase transit plan included in the CTP pertain specifically to transit to serve the Phase 1 and Phase 2 Metrorail Stations. The transit plan contemplates a Pacific Circulator to run



Loudoun County currently operates several commuter bus routes to Washington, DC, Tysons Corner and the West Falls Church Metrorail Station

along Pacific Boulevard on the west side of Route 28 and a Loudoun County Parkway Circulator which would connect Metrorail to the employment centers and transfer points along Loudoun County Parkway from the Dulles Greenway to Route 7. Plans in place have routes that temporarily serve the Wiehle Avenue Station in Reston once Phase 1 of Metrorail Service is operational.

With completion of Phase 2 of the Metrorail extensions, Phase III of transit implementation begins with reorienting the Loudoun County Parkway Circulator to the Route 772 Station and reorienting the Atlantic and Pacific circulators to the Route 606 Station. A new circulator to be known as the Dulles South Circulator will connect the Arcola area to the Route 606 Station. The County is continuing refinement of transit planning as arrival of Metrorail Service draws closer through the Transit Development Plan and other initiatives.

### ***Bicycle and Pedestrian Mobility Master Plan***

The County's Bicycle and Pedestrian Mobility Master Plan, adopted by the Board of Supervisors in 2003, provides the basis for County policy on non-motorized transportation.

The Department of Transportation and Capital Infrastructure (DTCI) has prepared a baseline map that identifies the existing, programmed, and planned but not programmed ("missing") bicycle and pedestrian facilities along the CTP roads in the County (See Bicycle & Pedestrian Circulation Map, p. 75). This information is being used to develop a prioritized list of bicycle and pedestrian projects, which when built, will improve the bicycle and pedestrian connectivity such as sidewalks and trails between several key locations within the County, including major employment and retail centers, schools, parks, and future Metrorail Stations. Accordingly, the following "missing links" around the proposed Route 772 Metrorail Station have been recommended to be included in the countywide prioritized list:

Within 1-mile radius of Route 772 Station (highest priority):

- Shellhorn Road – between Ashburn Village Boulevard and Loudoun Station; between Loudoun Station and Loudoun County Parkway
- Ashburn Village Boulevard – between Shellhorn Road and Waxpool Road
- Loudoun County Parkway – between Dulles Greenway and Shellhorn Road; between Dulles Greenway and Greenway Loop

Outside 1-mile radius of Route 772 Station:

- Farmwell Road - between Ashburn Village Boulevard and Smith Switch Road
- Ashburn Road - on either side of W&OD Trail
- Claiborne Parkway - along the interchange with Dulles Greenway
- Gloucester Parkway - between Smith Switch Road and Ray Muth Sr. Memorial Park
- Belmont Ridge - on either side of the interchange with Dulles Greenway
- Ryan Road - between Belle Terra Drive and Forest Manor Drive

### **Demographics**

Forecasts of local and regional population, households, and employment are developed through a cooperative process involving Loudoun County staff, Loudoun County's Fiscal Impact Committee, and the Metropolitan Washington Council of Governments (MWCOG) and its member jurisdictions. Loudoun County's forecasts take into consideration historical and



recent trends, market conditions, approved projects, the adopted Revised General Plan and area plans that constitute development policies, and transportation improvements, including the proposed Metro extension.

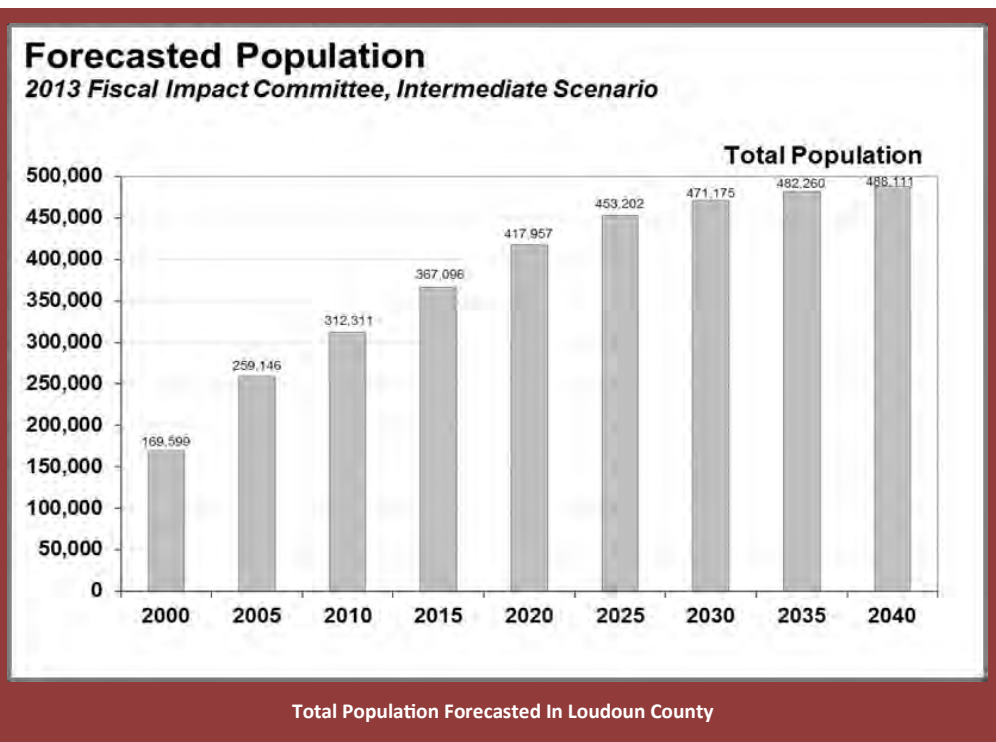
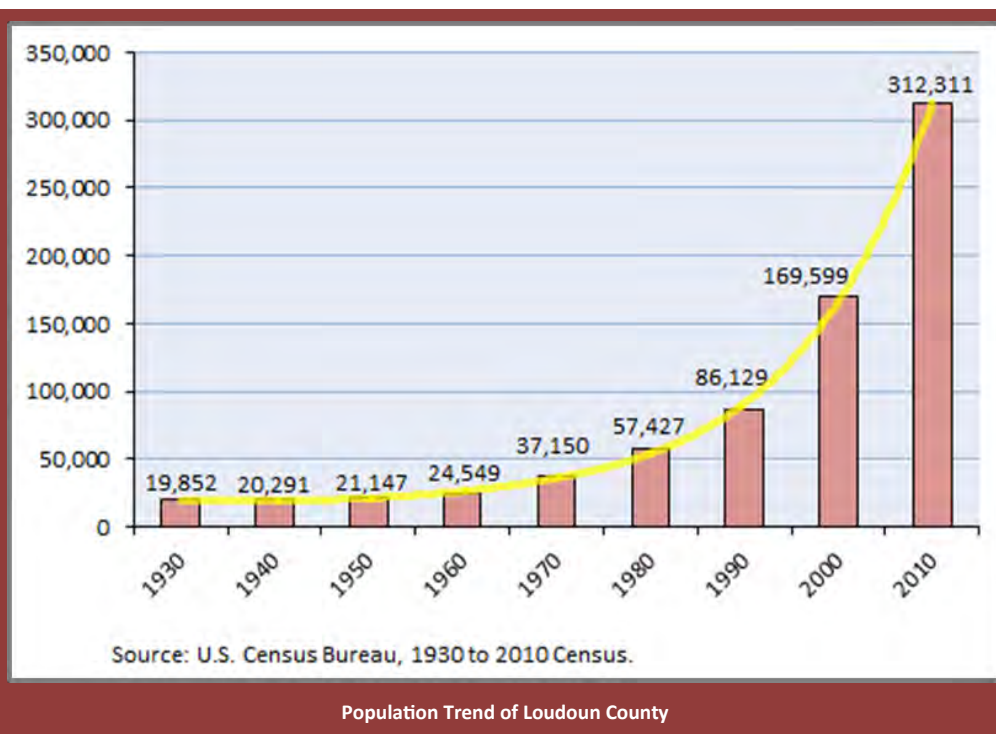
The County level forecasts that follow are sourced from the 2013 Fiscal Impact Committee forecast series that was adopted by the committee on December 12, 2013 and are currently before the Board of Supervisors for approval. Further information on the Fiscal Impact Committee process, the roll of the committee, and methodologies can be found in the

2013 Fiscal Impact Committee Guidelines document. The 2013 Fiscal Impact Committee Guidelines formed the basis for the Loudoun County Round 8.3 COG Cooperative Forecasts Traffic Analysis Zone (TAZ) that were released by the County on March 7, 2014. The Round 8.3 TAZ data were used to compile the forecast data for the Study Area that follows.

More information on the COG process can be found in the *MWCOG Growth Trends to 2040* and Demographic Estimates and Forecasts resources provided in the resources section at the end of this document.

### Population

Prior to 1960, Loudoun County had a relatively constant population of 20,000. Following the construction of Washington Dulles International Airport in the early 1960's the population and number of non-residential uses increased rapidly. Loudoun County was the fifth fastest growing county in the United States between 2000 and 2010 with its population





increasing 84 percent. Loudoun County continues to be one of the fastest growing counties, currently ranking fifteenth in the nation. The County's 2013 population is 340,112 according estimates by the County, an increase of 8.9% since 2010. The County's population is expected to be 417,957 by 2020 and 488,111 by 2040, increases of 23% and 44% from 2013 respectively according to the Loudoun County 2013 Fiscal Impact Committee and Department of Planning.

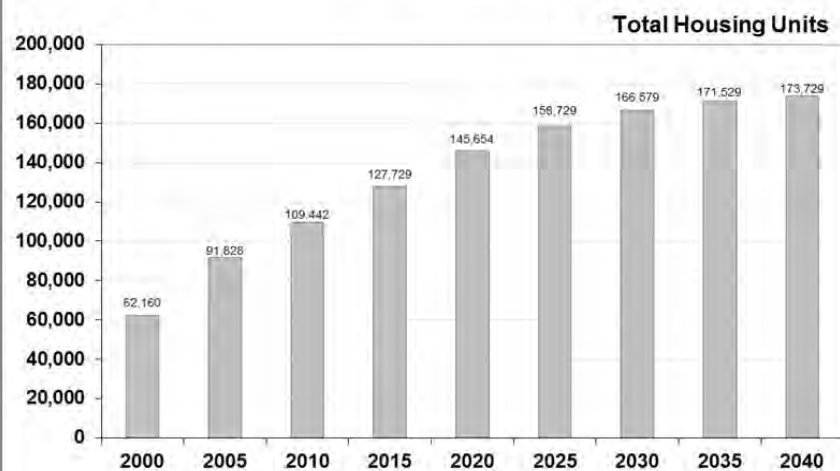
Much of the Study Area remains undeveloped or developed with non-residential uses. The 2010 population of Loudoun County was 312,311 according to the U.S. Census Bureau Decennial Census. Only 501 people resided within the Study Area in 2010, or 0.2% of the County's population.

The future population within the Study Area will be able to reside in the approved communities of Moorefield Station, Loudoun Station, Dulles Parkway Center, and Dulles World. All the residential components of the approved developments in the Metrorail District are expected to be built-out by 2040. According to the Loudoun County Round 8.3 forecasts, the Study Area is forecasted to have a population of 8,004 in 2020, 15,961 in 2030, and 18,862 in 2040. The share of the County's population residing in the Study Area is expected to increase to 1.9% in 2020, 3.4% in 2030, and 3.9% by 2040. The location of where and how much new population growth will occur within the Study Area between 2010 and 2040 is shown on the population growth map shown in Figure 15.

### Housing Units

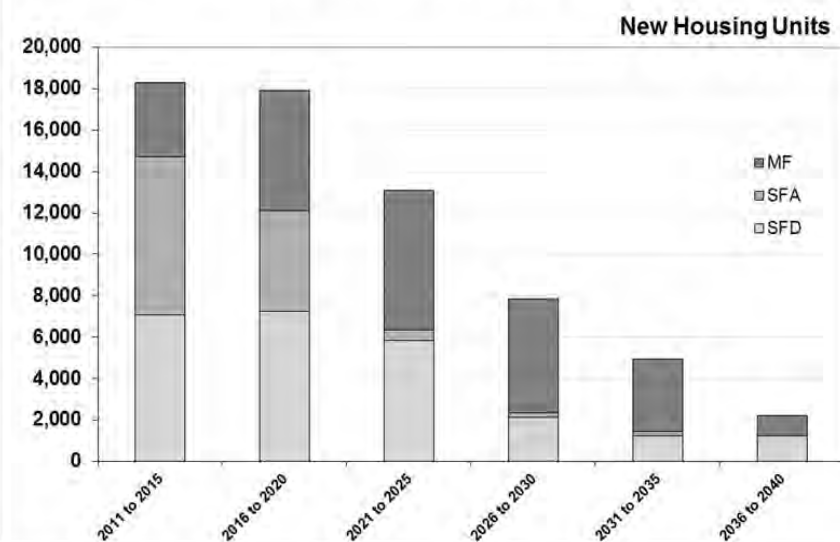
According to the U.S. Census Bureau Decennial Census, the number of housing units in 2010 in Loudoun County was 109,442 with only 220 (0.2%) of those in the Study Area. According to the Loudoun County Round 8.3 forecasts, Loudoun County as a whole is forecasted to have 62,502 new housing units

**Forecasted Housing Units**  
2013 Fiscal Impact Committee, Intermediate Scenario



Total Housing Units Forecasted In Loudoun County

**Forecasted New Housing Units by Type**  
2013 Fiscal Impact Committee, Intermediate Scenario



Forecasted New Housing Units by Type in Loudoun County



constructed between 2010 and 2040, and the service district is forecasted to have 9,238 constructed in the same time frame.

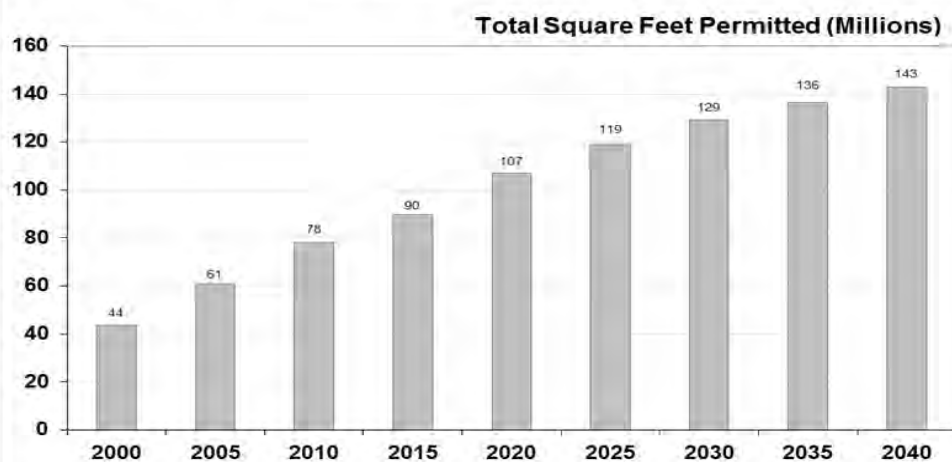
The Study Area is forecasted to grow substantially to 3,666 housing units in 2020, 7,875 in 2030, and 9,458 in 2040. The share of the County's housing units located in the Study Area is expected to increase to 2.5% in 2020, 4.8% in 2030, and 5.5% by 2040. The majority of these units will come with construction of the Moorefield Station, Loudoun Station, Dulles Parkway Center, and Dulles World Center developments as discussed above. The Study Area will consist of 14.7% of Loudoun County's new housing unit growth through 2040. The majority of these new units will be in multi-family developments.

### **Non-Residential Development**

The County has many non-residential commercial projects approved but not yet fully developed. Many of these projects are in the Study Area as discussed above. The non-residential square footage in 2010 in Loudoun County totaled 78 million. It is forecasted to increase to 143 million by 2040, an increase of 65 million or 83%.

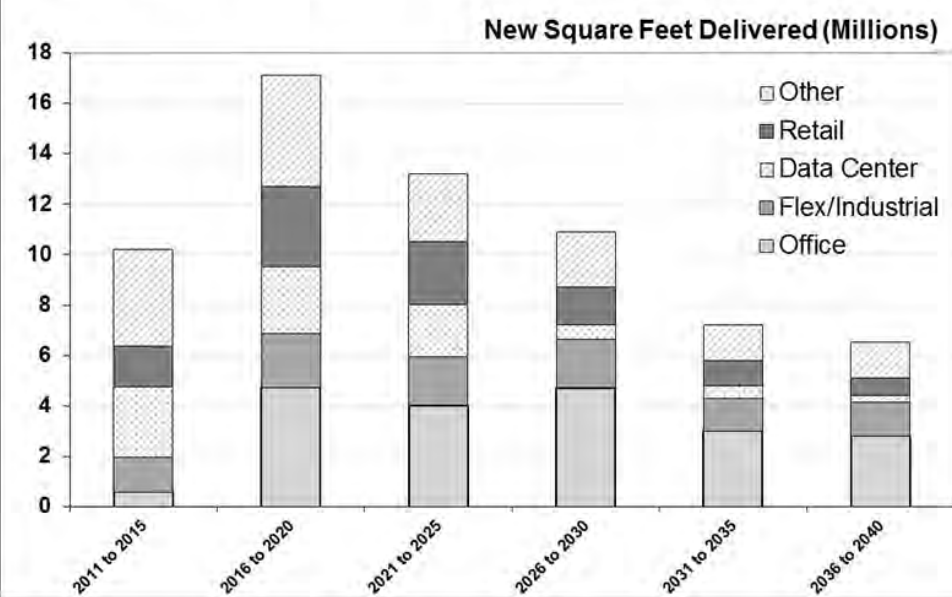
Excluding new non-residential square feet at the Washington Dulles Airport terminal and cargo facilities, the Study Area's non-residential square footage is forecasted to

### **Forecasted Nonresidential Square Feet** *2013 Fiscal Impact Committee, Intermediate Scenario*



Total Non-Residential Development Forecast of Loudoun County

### **Forecasted New Nonresidential Square Feet by Type** *2013 Fiscal Impact Committee, Intermediate Scenario*



Total Non-Residential Development by Type in Loudoun County



increase by more than 6 million square feet between 2011 and 2020, an additional 5.7 million square feet from 2021 to 2030, and an additional 3.9 million square feet from 2031 to 2040. The Study Area represents 24% of Loudoun's non-residential growth. In the long term, a sufficient supply of land will continue to be available in the Study Area and Countywide after 2040 for non-residential development, based on the County's current land use plan.

### Employment

There were an estimated 145,083 jobs located in Loudoun County in 2010 according to Loudoun County Government estimates. The Study Area had 35,594 jobs in 2010, or 21.4% of the County's jobs.

The Study Area's employment, inclusive of Washington Dulles International Airport, is forecasted to increase to 50,355 in 2020, 66,093 in 2030, and 76,142 in 2040. The location of where and how much new employment growth is likely to occur within the service district between 2010 and 2040 is shown in Figure 16.

### Income

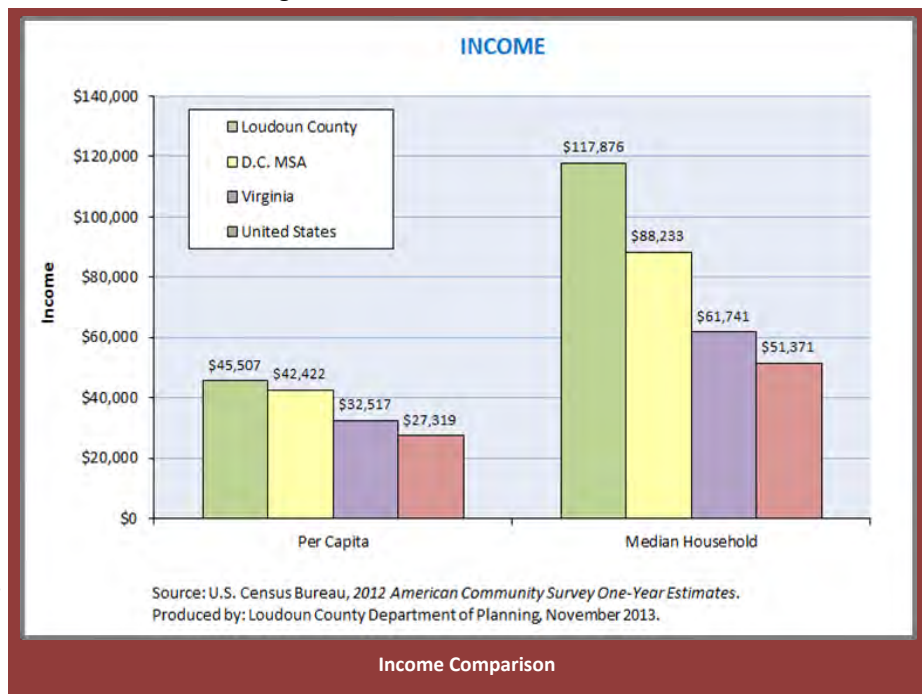
Incomes in Loudoun County are among the highest in the nation. Loudoun County's median household income was ranked second in the nation out of all jurisdictions according to the U.S. Census Bureau's 2008-2012 American Community Survey five-year averages. Loudoun County's median household income has ranked highest in the nation since 2007 among jurisdictions with populations above 65,000 according to the U.S. Census Bureau's American Community Survey one-year estimates. In 2012, Loudoun's median was \$117,876, more than twice the national median of \$51,371,

and nearly twice Virginia's median of \$61,741. Compared to the Washington, D.C. Metropolitan Statistical Area's (MSA) median of \$88,233, Loudoun was 34% higher. Loudoun's high median household income is largely due to the county's highly-educated workforce and the availability of high-wage jobs in the region.

Loudoun County's 2012 per capita income of \$45,507 was 67% higher than the national per capita income of \$27,319, 40% higher than Virginia's \$32,517, and 7% higher than the Washington D.C. MSA's \$42,422. Loudoun County's per capita income was ranked 19<sup>th</sup> in the nation out of all jurisdictions according to the U.S. Census Bureau's 2008-2012 American Community Survey five-year averages. Among jurisdictions with populations above 65,000, Loudoun County's per capita income ranks 14<sup>th</sup> according to the U.S. Census Bureau's 2012 American Community Survey one-year estimates.

### Education

Loudoun County has a highly-educated workforce. Educational attainment levels in Loudoun County are among the highest in the nation. The share of the County's population age 25 and over holding a bachelor's or graduate/professional degree was ranked ninth in the nation out of all jurisdictions according to the U.S. Census Bureau's 2008-2012 American Community Survey five-year averages. The share of Loudoun County's population age 25 and over holding a bachelor's or



graduate/professional degree was 57.5%, ranking 7<sup>th</sup> highest in the nation in 2012 among jurisdictions with populations above 65,000 according to the U.S. Census Bureau's American Community Survey one-year estimates.

As one of the most highly-educated locales in the U.S., Loudoun and the Washington, D.C. metro area offer a wealth of employees for information and communications technology companies, federal government contractors and other knowledge-intensive industries. Loudoun employers also have access to world class educational resources throughout the Washington, D.C. metro area. These universities, including George Washington University, George Mason University, and Northern Virginia Community College, provide workforce training as well as significant research and development assets.

### ***Employment by Industry Sectors***

The positive job growth in Loudoun County can be attributed in part to its diverse business base. Loudoun County's proximity to Washington, D.C. and the federal government, educated population, abundant fiber access and presence of Washington Dulles International Airport are significant drivers of the County's business activity. Based on these strengths, a 2012 cluster analysis of Loudoun County's economy points to a number of important sectors for Loudoun County, including:

- Data Centers
- Information & Communications Technology
- Aerospace and Aviation
- Transportation, Warehousing and Logistics

These clusters are represented in the following graph under the sector labels:

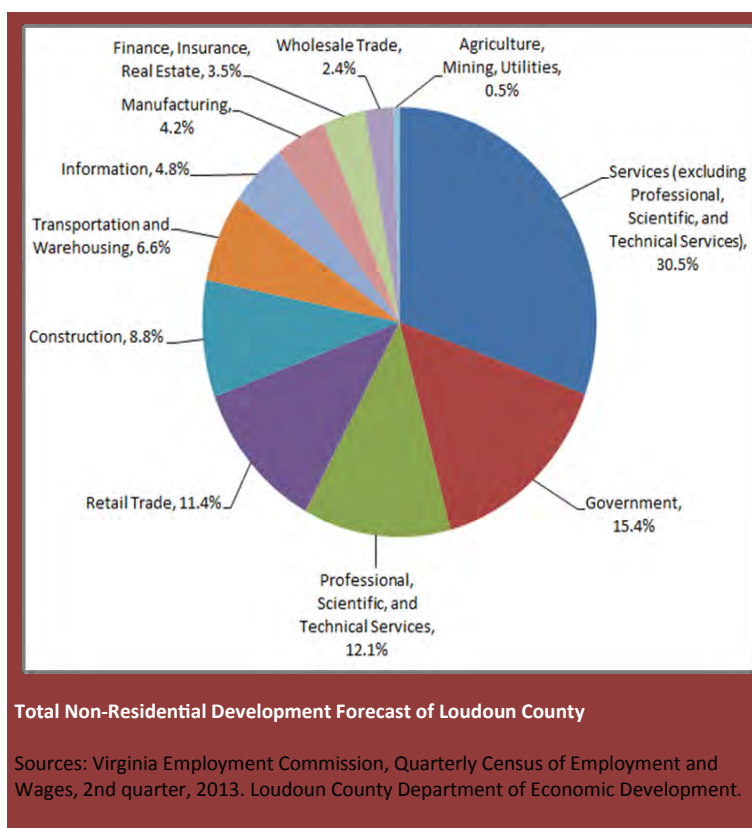
- Professional, Scientific and Management Services
- Information
- Manufacturing
- Transportation and Warehousing

In addition, employment in Loudoun County is also driven in part by Loudoun's significant population increase over the past decade. Population dependent sectors include:

- Services
- Retail Trade
- Construction

### ***Major Employers in the Study Area***

Loudoun County and the Study Area's major employers demonstrate the business environment diversity that exists. The 20 largest employers in Loudoun County, excluding retail and local government industry sector employers, are listed in the table that follows. The yellow highlighted records indicate those employers that are located within the Study Area.





Employer	Industry	Number of Employees (2Q 2013)
AOL Inc.	Information	1,000 - 4,999
INOVA Loudoun Hospital	Health Care and Social Assistance	1,000 - 4,999
M.C. Dean Inc.	Construction	1,000 - 4,999
Orbital Sciences Corporation	Manufacturing	1,000 - 4,999
Raytheon Company	Manufacturing	1,000 - 4,999
U.S. Department Of Homeland Security	Public Administration	1,000 - 4,999
United Airlines Inc.	Transportation and Warehousing	1,000 - 4,999
Verizon	Information	1,000 - 4,999
Air Services Corp.	Transportation and Warehousing	500 - 999
Club Demonstration Service Inc.	Professional, Scientific, and Technical Services	500 - 999
Dobbs International Service	Accommodation and Food Services	500 - 999
J K Moving & Storage Inc.	Transportation and Warehousing	500 - 999
Loudoun Medical Group	Health Care and Social Assistance	500 - 999
Metro Washington Airports Authority	Public Administration	500 - 999
National Electronics Warranty Corp.	Finance and Insurance	500 - 999
Neustar Inc.	Professional, Scientific, and Technical Services	500 - 999
Swissport Usa Inc.	Transportation and Warehousing	500 - 999
Toll Brothers Inc.	Construction	500 - 999
U.S. Dept. Of Transportation	Public Administration	500 - 999
US Airways Express	Transportation and Warehousing	500 - 999
Study Area Employer		
Non-Study Area Employer		

Sources: Virginia Employment Commission, Quarterly Census of Employment and Wages, 2nd quarter, 2013; Loudoun County Department of Economic Development.

## **Previous Studies**

### ***RCLCO Market and Fiscal Impact Analysis of the Phase 2 Metrorail Extension to Loudoun County***

Robert Charles Lesser & Co. (RCLCO) was originally retained by Loudoun County to analyze the economic impact of completion of Phase 2 of the Silver Line in 2010. In April 2012, RCLCO prepared a Market and Fiscal Impact Analysis to update work previously presented in April 2011. The updated study considered factors such as the Route 28 Plan Amendment adopted in March 2011, the development potential on MWAA land at the proposed 606 Station, and current economic conditions. The study found that total office development through 2040 would increase by 6.5% (1,403,000 square feet) with extension of Metrorail Service into Loudoun County. At the station areas specifically, office development is expected to be between 56% and 74% greater than without Metrorail. The amount of retail development was also forecasted to be 54% greater with extension of Metrorail Service.

Another key point to note is that the study found that Loudoun County would capture 7.5% of total office development that would otherwise locate in Reston/Herndon as a result of the Phase 2 Silver Line extension. The full study provides a range of detailed analyses, figures, and findings regarding the market and fiscal environment and is available through the link in the resources section at the end of this briefing book.



### ***Eastern Loudoun Transportation Study***

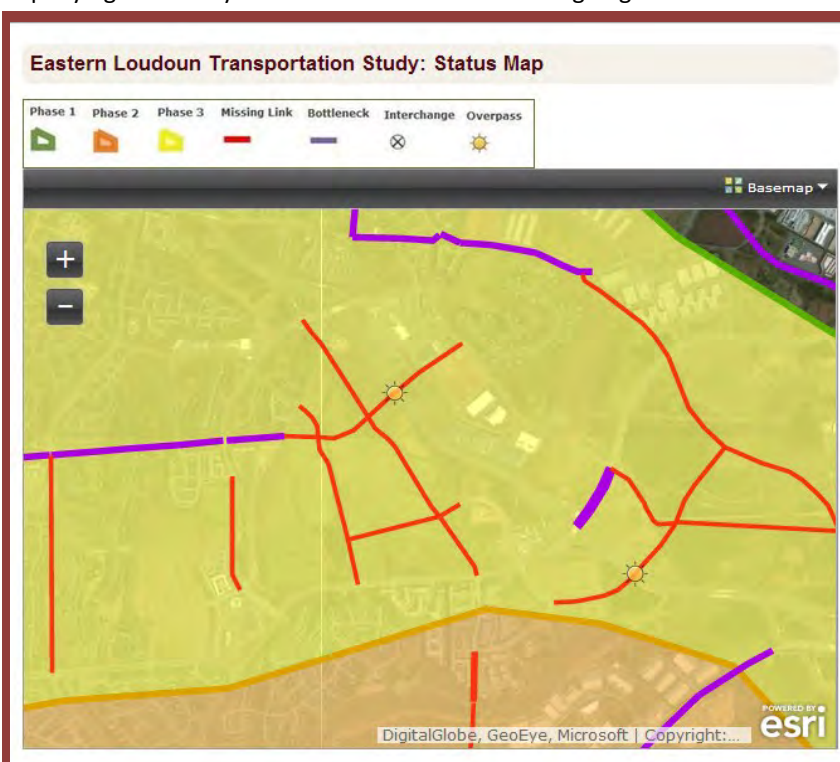
In 2012, the Board of Supervisors directed staff to undertake a study of the road network in Eastern Loudoun County. The purpose of the study was to provide information relating to the Countywide Transportation Plan (CTP) road network to include:

1. Network deficiencies;
2. Missing links;
3. Cost estimates to build the interim condition;
4. Development proffers/conditions related to the missing links and network deficiencies;
5. The proffer/condition triggers;
6. Right of way availability; and
7. Potential funding sources if the projects are not funded wholly or in part through proffers/conditions.

Figure 17 provides the results of this study and demonstrates missing links and bottlenecks identified by the study within the Silver Line Study Area. The report accompanying the study also reviewed recent and ongoing efforts to address network deficiencies and missing links in the CTP road network; provided an existing conditions inventory of the deficiencies and provided a cost estimate to build out the CTP road network to the interim condition; and offered a funding outlook of non-proffer funding sources.

The study was divided into three phases covering specific areas in the County. The County has a webpage dedicated to this study. That webpage, which is included as a listed resource at the end of this study, provides links to all the reports detailing conditions for each link. In addition, an interactive map identifying the various missing links is identified provided as a resource.

In summary, the Study Area contains roughly 15 missing links. Many of those links are located within the Moorefield Station and Loudoun Station developments and will be built as proffered improvements when development occurs.



The Eastern Loudoun Transportation Study provides an online mapping tool for identifying the status of portions of the roadway network that have not been constructed.

### ***Fulton Research - Route 28 Corridor Analysis of Development Potential for Class A Office***

The Route 28 Corridor Analysis of Development Potential for Class A Office was prepared in August 2009 prior to adoption of the Route 28 Corridor Plan. The study concluded that existing land use policies and zoning regulations in place at the

time would result in haphazard development of 2 million square feet through 2040. The study also recognized the important role of Washington Dulles International Airport as a significant economic development engine and the increased cargo capacity for international freight transport to reach 798,453 metric tons, a 129 percent increase over the 2007 level of 348,043 metric tons. The key outcome of the study demonstrated that there was market demand for a variety of Class A office, Class A mixed-use space, and Class A secure campus development. The study ultimately recommended changes to be made to the County policies to allow these various types of office development to be better captured in the County.

## **Government**

The various levels of government play an important role in shaping the future of the Study Area. The Federal Government comes into play as a result of Washington Dulles International Airport and the land ownership and leasing agreements associated with the airport. The State plays an important role given powers granted to the County under the “Dillon Rule” and the proffer system. The Primary role of the County within the scope of this study is to develop a Comprehensive Plan and zoning to achieve the desired land use vision and to implement a Capital Improvements Program to provide the infrastructure and services necessary to support Metrorail operations and future residents and visitors.

### ***Federal***

The Federal government plays a major role in shaping the Metrorail Service District due to the fact that two of three Silver Line Stations in Loudoun County are located on Washington Dulles International Airport property. Washington Dulles International Airport property is owned by the US Department of Transportation but leased to the Metropolitan Washington Airports Authority (MWAA). MWAA is an independent airport authority, created by the Commonwealth of Virginia, the State of Maryland, and the District of Columbia with the consent of the United States Congress to oversee management, operations, and capital development of Washington, D.C.'s two major airports.

Washington Dulles International Airport was transferred to the Airports Authority in 1987 under a 50-year lease authorized by the Metropolitan Washington Airports Act of 1986, Title VI of Public Law 99-500. The Airports Authority is responsible for capital improvements at the airport and for managing the Dulles Corridor Metrorail Project.

Given this leasing arrangement, the Federal Government and MWAA in effect have control over the land development on airport property which comprises a significant component of the Study Area. While significant land development potential exists on airport property, the land use decision making process ultimately lies outside of Loudoun County's jurisdiction.

### ***State***

#### **Dillon Rule**

An important aspect of this study is understanding the role that Virginia Government plays in the County. Virginia operates under the “Dillon Rule” which gives local governments limited authority. Local governments have only those powers that are specifically conferred on them by the Virginia General Assembly; those powers that are necessarily or fairly implied from a specific grant of authority; and those powers that are essential to the purposes of government -- not simply convenient but indispensable. The Dillon Rule also states that a power has only been conferred on a local government when there is no reasonable doubt as to whether it has been conferred. In contrast, most other states have some form of “home rule” provisions that permit governmental functions that are not specifically precluded by the laws of the state.

#### **Proffer System**

Loudoun County and other jurisdictions in Virginia have the authority to accept proffers in conjunction with development rezonings. Proffers are voluntary commitments that a developer makes to the County to offset the impacts of a proposed development and which assist, among other things, in improving the public infrastructure needed to serve new residents



or users of his/her development. The proffer system is one of the tools used by the County to secure the public infrastructure needed to support new development. Proffers are provided in accordance with County policies and guidelines expressed in the Revised General Plan through the rezoning process.

Proffers include monetary contributions toward capital facilities such as schools, parks, libraries, roads and other public facilities. Proffers also may include dedication of property for the future siting of schools, parks, trails, roads, and other facilities, commitments to design, and/or agreements to construct public facilities and to have them in place to serve future development. The developer submits the proffers in writing when applying for the rezoning. Once the County approves the rezoning request, the proffer agreement becomes an enforceable zoning regulation and runs with the land until a subsequent rezoning. The County holds the signed agreement and reviews it for implementation during and after the site plan and subdivision processes preceding actual development.

The proffer system has advantages and disadvantages. The key advantages are that it is voluntary and flexible, which allows contributions to be tailored to specific capital needs at the time. A disadvantage is that proffers are reactive and based on the market and on development decisions made by individual landowners leading to uncertainties about what, when, and if proffers will actually be realized.

### **County**

The Revised General Plan is the foundation of the County's Comprehensive Plan and an official public document adopted by the Loudoun County Board of Supervisors. The basic purpose of a Comprehensive Plan is established in the Code of Virginia, Volume 3A, paragraph 15.2-2223, which states: "The Comprehensive Plan shall be made with the purpose of guiding and accomplishing a coordinated, adjusted, and harmonious development of the territory which will, in accordance with present and probable future needs and resources, best promote the health, safety, morals, order, convenience, prosperity, and general welfare of the inhabitants."

The Revised General Plan provides the basis for evaluating land-development proposals. The Plan is the foundation for amendments to the Zoning and Subdivision ordinances to ensure that the County's goals are implemented through the regulatory process. Ordinances and documents are intended to be updated so that they comply with the revised Plan policies.

The County is also responsible for managing its Capital Improvement Program (CIP). The County's Revised General Plan calls for the development of a ten-year Capital Needs Assessment (CNA) every two years, and the development and adoption of a six-year CIP by the Board of Supervisors annually. The CNA is unique to Loudoun County and provides a bridge between the short-term CIP and the Revised General Plan. This planning process attempts to address the County's projected capital needs associated with new development. Forecasting the County's highest priority capital projects over a six-year period provides an extended look at facilities recommended for development and appropriation to the Board of Supervisors.

As a planning and development tool, the CIP ensures that capital improvements are coordinated and well-timed to maximize the County's financial resources. Typically, only projects that have first been identified in the CNA are considered for inclusion in the CIP. The CNA helps determine what projects should be considered for funding consideration in the CIP based upon population and demographic trends in relation to the County's Capital Facility Standards. The CIP then helps prioritize these requests for new facilities in relation to Department service planning, opportunities for co-location, availability of funding and land sites, and the demonstrated need for new facilities.





***Private Sector Involvement***

There are roughly 10 to 15 property owners with significant tracts of developable land within the Study Area. Many other smaller properties have development and redevelopment potential but the land use pattern and character of areas with existing development potential will be somewhat fixed until redevelopment opportunities become more financially viable.

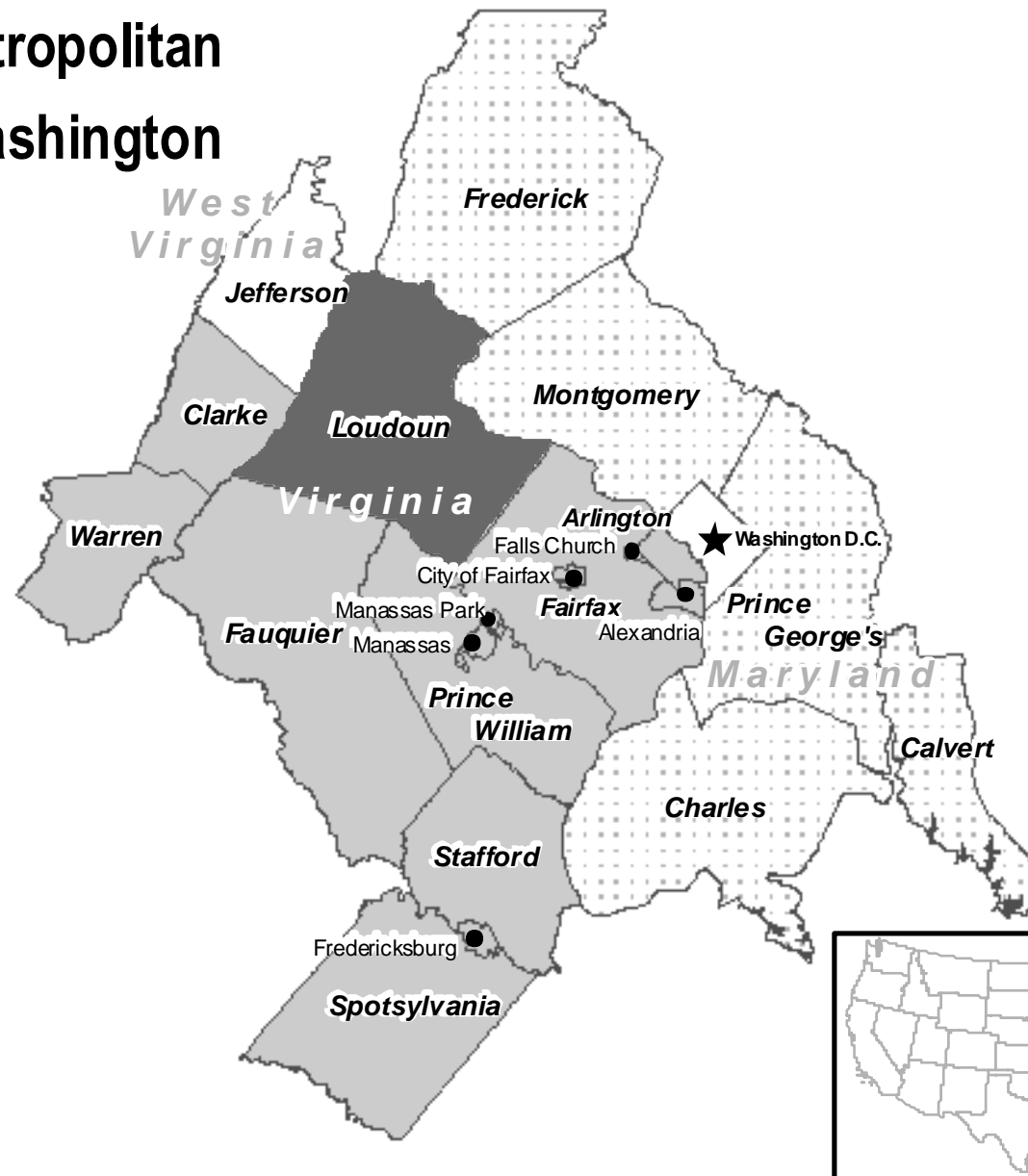


## **Resources**

1. Loudoun County Revised General Plan—<http://www.loudoun.gov/index.aspx?NID=1066>
2. Airport History - <http://www.metwashairports.com/dulles/661.htm>
3. Airport Flight Stats - <http://www.metwashairports.com/dulles/653.htm>
4. RCLCO Market and Fiscal Impact Analysis of the Phase 2 Metrorail Extension to Loudoun County  
<http://www.loudoun.gov/DocumentCenter/View/61055>
5. 2010 Countywide Transportation Plan - <http://www.loudoun.gov/DocumentCenter/Home/View/70764>
6. Eastern Loudoun Transportation Study - <http://www.loudoun.gov/index.aspx?NID=2902>
7. Eastern Loudoun Transportation Study Map - <http://www.loudoun.gov/index.aspx?nid=2815>
8. Loudoun County Transit Development Plan - <http://www.loudoun.gov/DocumentCenter/Home/View/57543>
9. Transit Prioritization Study - [http://www.loudoun.gov/documents/11/1336/11058/11562/Item%20%20-%20Transportation%20Prioritization%20Study%20for%20Area%20Surrounding%20the%20New%20Metrorail%20Stations%20COMBINED\\_201307121457057765.pdf](http://www.loudoun.gov/documents/11/1336/11058/11562/Item%20%20-%20Transportation%20Prioritization%20Study%20for%20Area%20Surrounding%20the%20New%20Metrorail%20Stations%20COMBINED_201307121457057765.pdf)
10. Parking Facilities - <http://www.loudoun.gov/index.aspx?NID=2948>
11. Route 28 Corridor Zoning Ordinance Update - <http://www.loudoun.gov/index.aspx?NID=2566>
12. Revised 1993 Zoning Ordinance - <http://www.loudoun.gov/DocumentCenter/View/99645>
13. Route 28 Corridor Analysis of Development Potential for Class A Office - <http://www.loudoun.gov/documentcenter/view/27129>
14. Fiscal Impact Committee Guidelines - <http://www.loudoun.gov/DocumentCenter/View/98599>
15. Demographics - <http://www.loudoun.gov/Demographics>
16. MWCOG, Growth Trends to 2040 –  
<http://www.mwco.org/uploads/pub-documents/oV5fV1o20110120090230.pdf>
17. Demographic Estimates and Forecasts - <http://www.loudoun.gov/index.aspx?NID=1913>
18. Capital Needs Assessment - <https://va-loudouncounty.civicplus.com/DocumentCenter/Home/View/32634>



# Metropolitan Washington



Loudoun County Government  
Department of Planning

Urban Land Institute  
Technical Assistance Panel  
METRORAIL SERVICE DISTRICT STUDY

Figure 1  
Regional Location

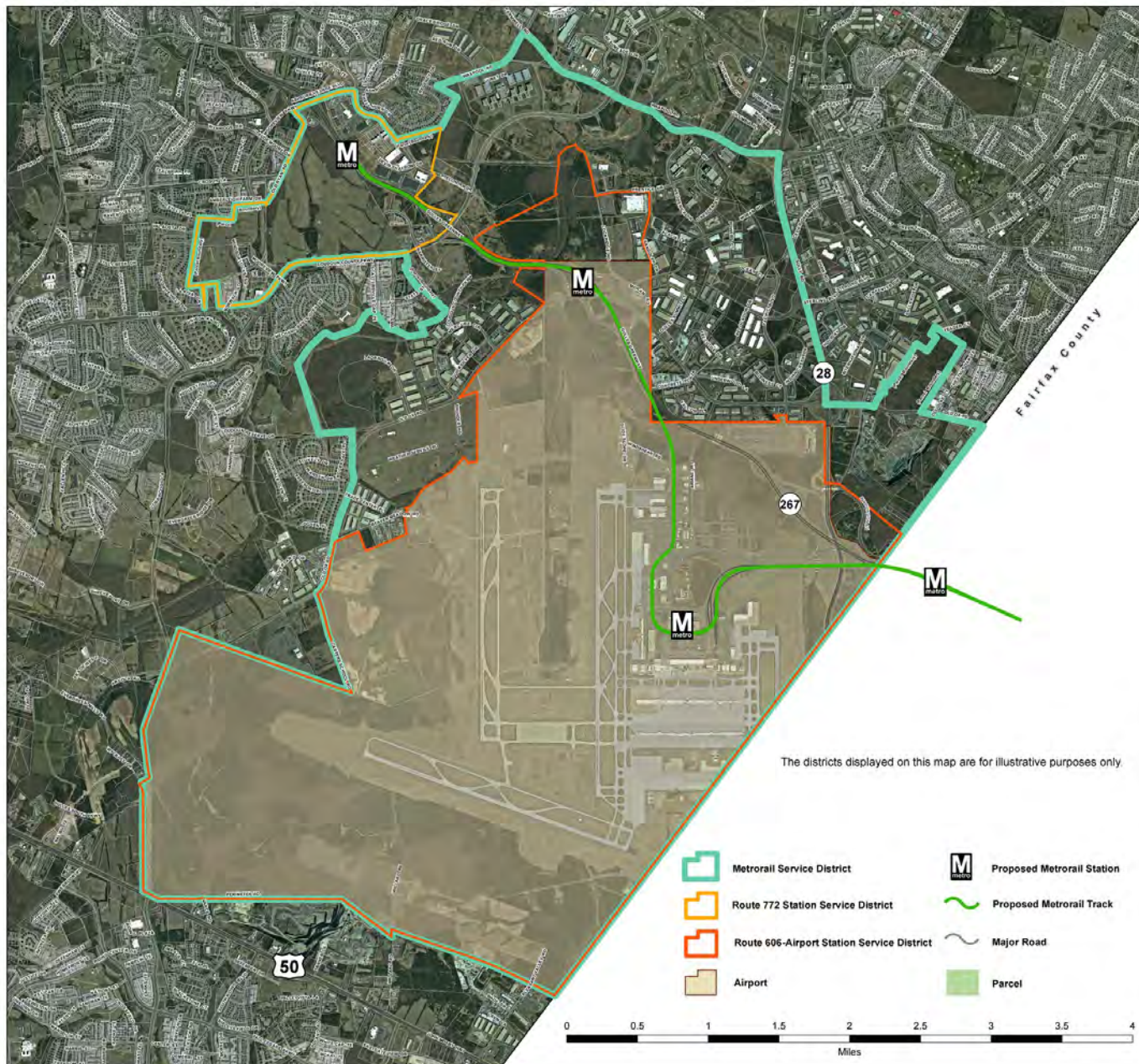


Loudoun County Government  
Department of Planning

**Urban Land Institute**  
Technical Assistance Panel  
METRORAIL SERVICE DISTRICT STUDY

**Figure 2**  
**Towns and Communities**



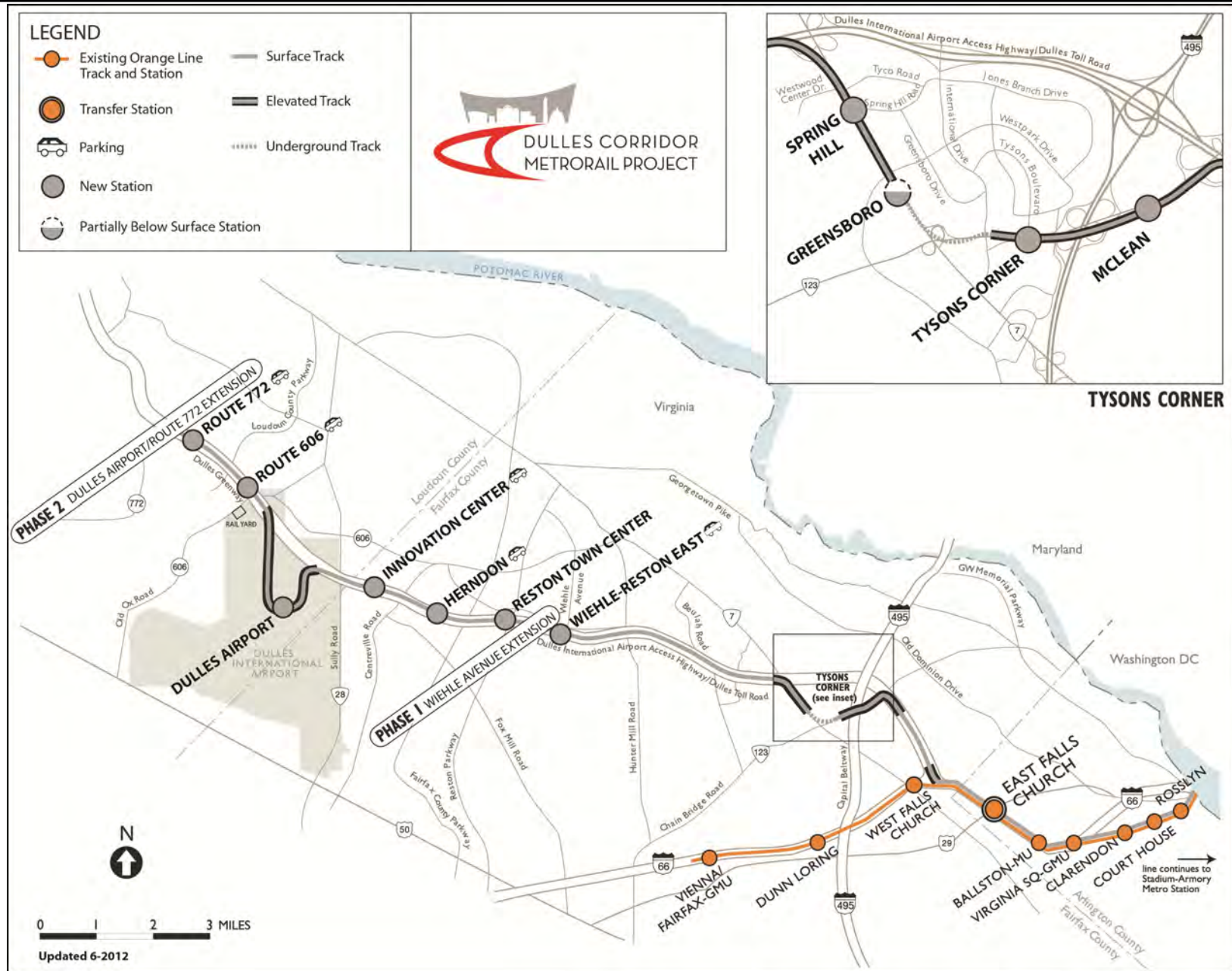


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**Figure 3**  
**Metrorail Service District**  
**(Study Area)**

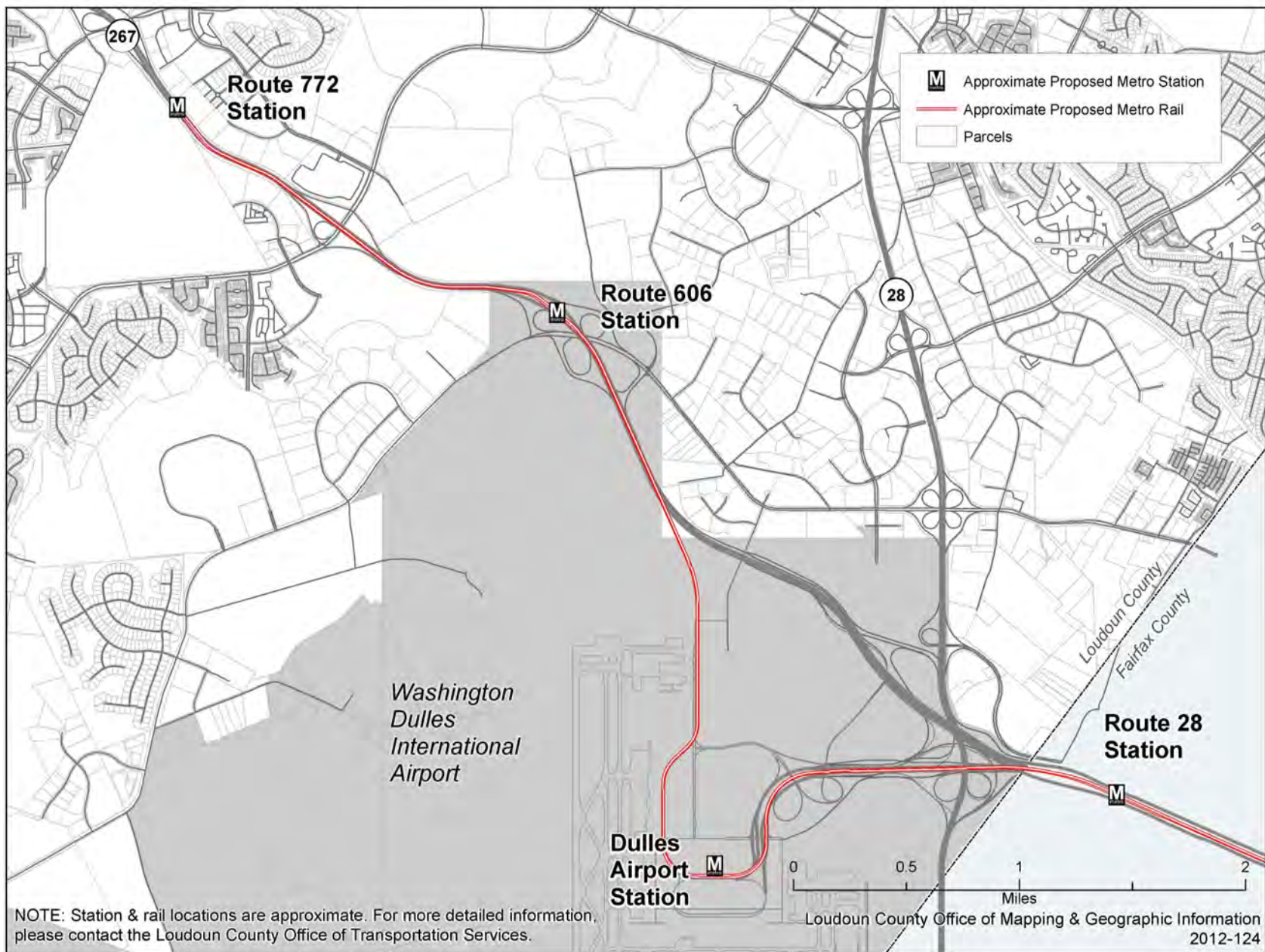




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**Figure 4**  
**Proposed Silver Line Route**

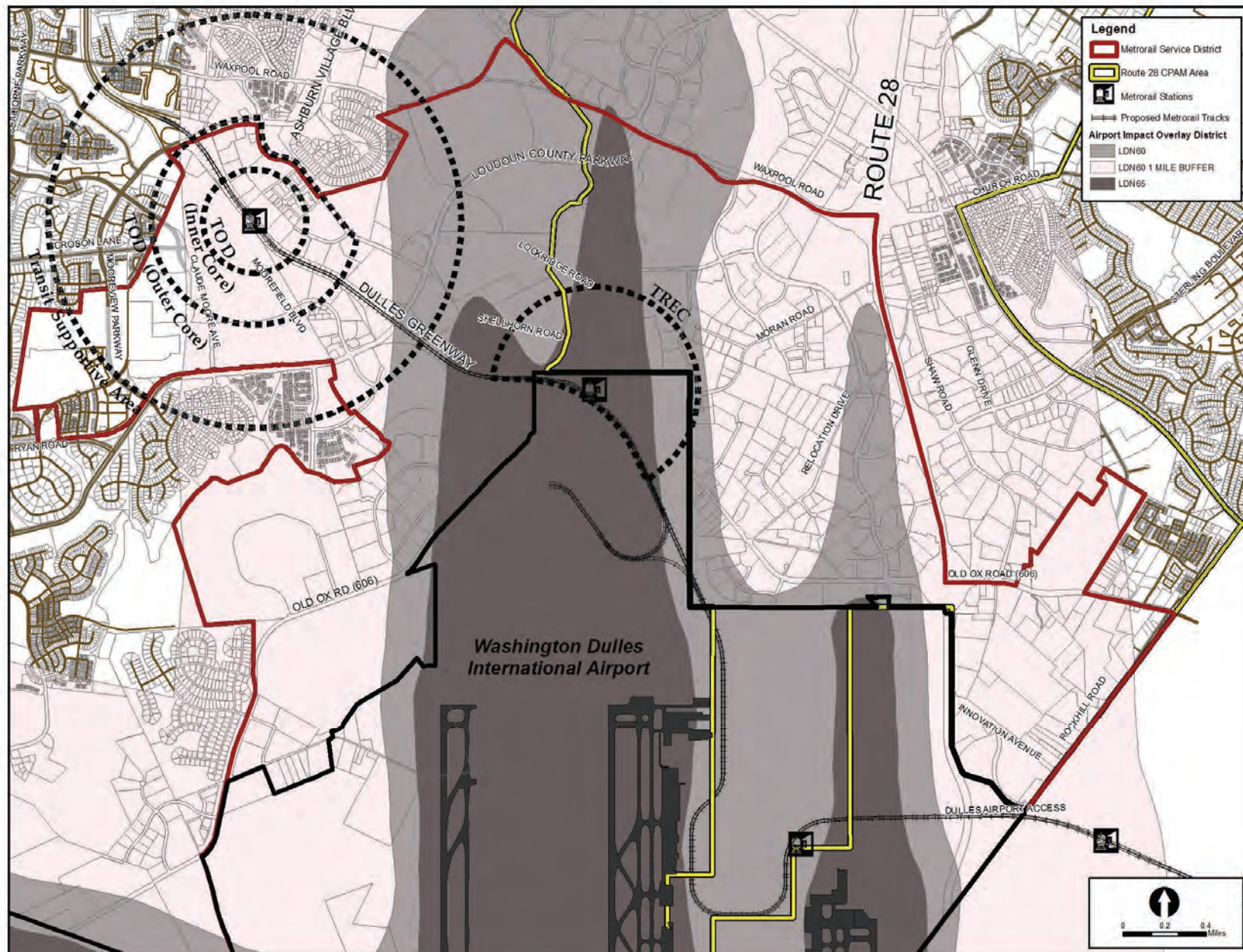


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**Figure 5**  
**Proposed Station Locations**





Prepared by the Department of Planning, March 2014

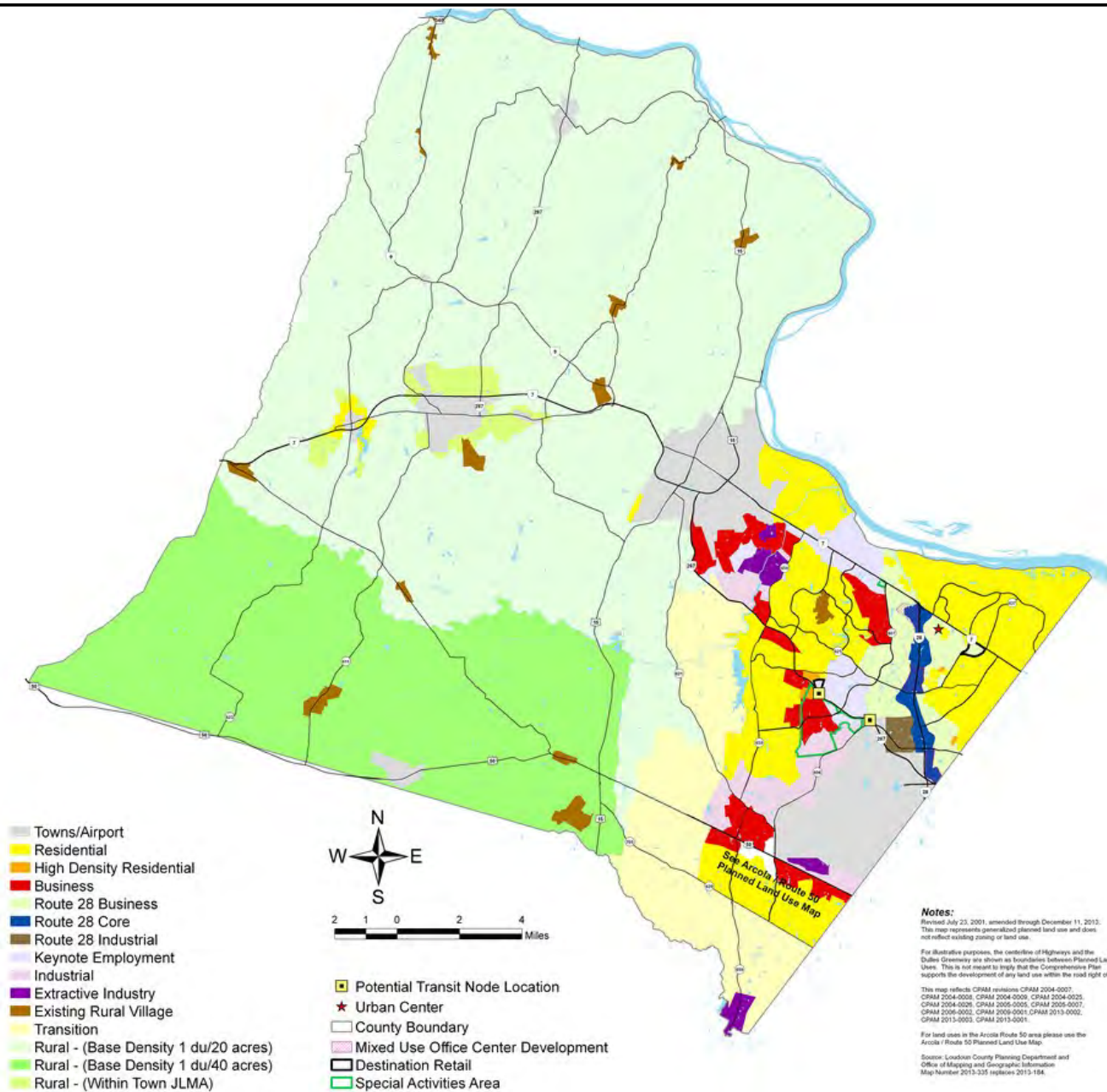


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Figure 6  
Airport Impact Overlay District

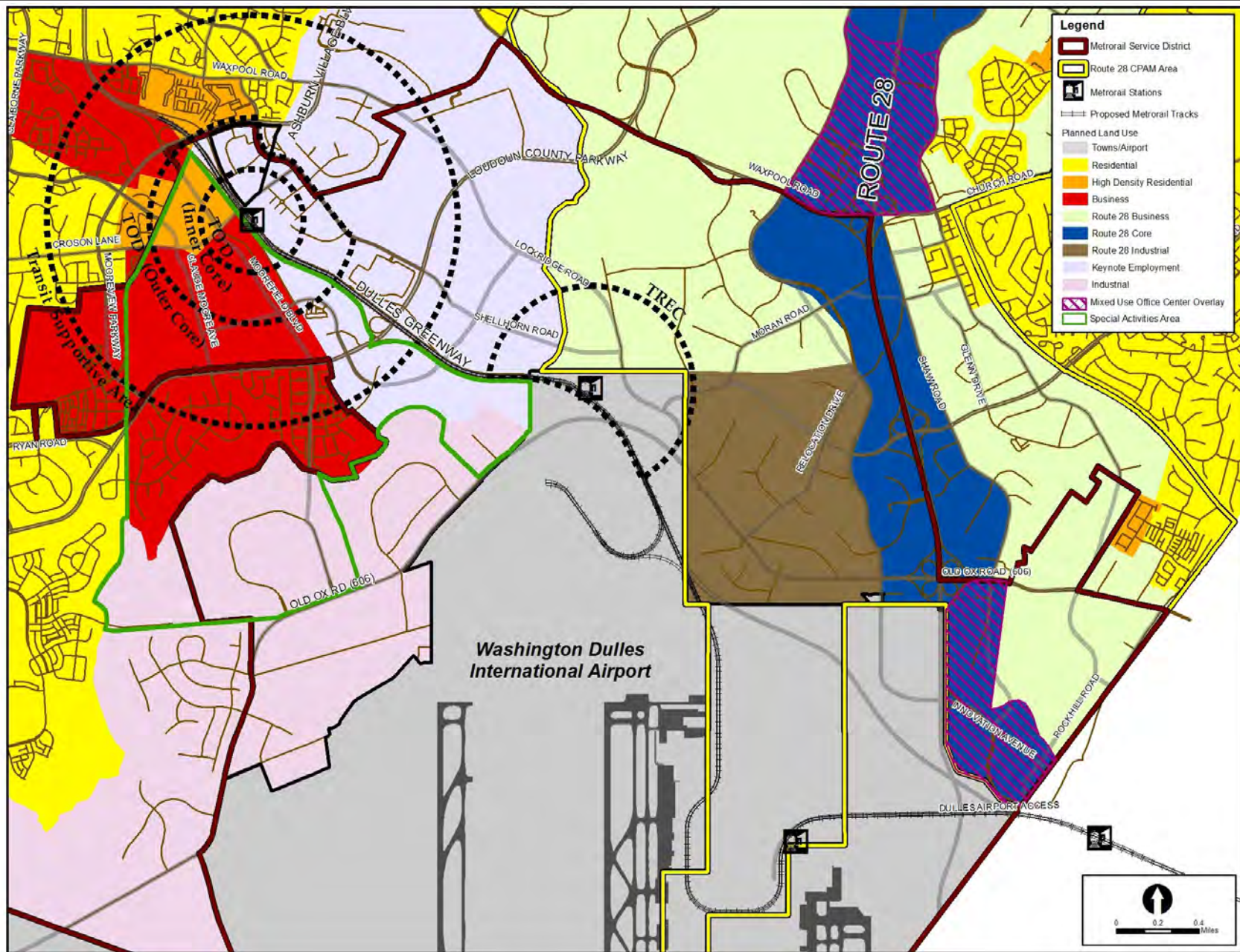




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**Figure 7**  
**Planned Land Use**  
**(Countywide)**

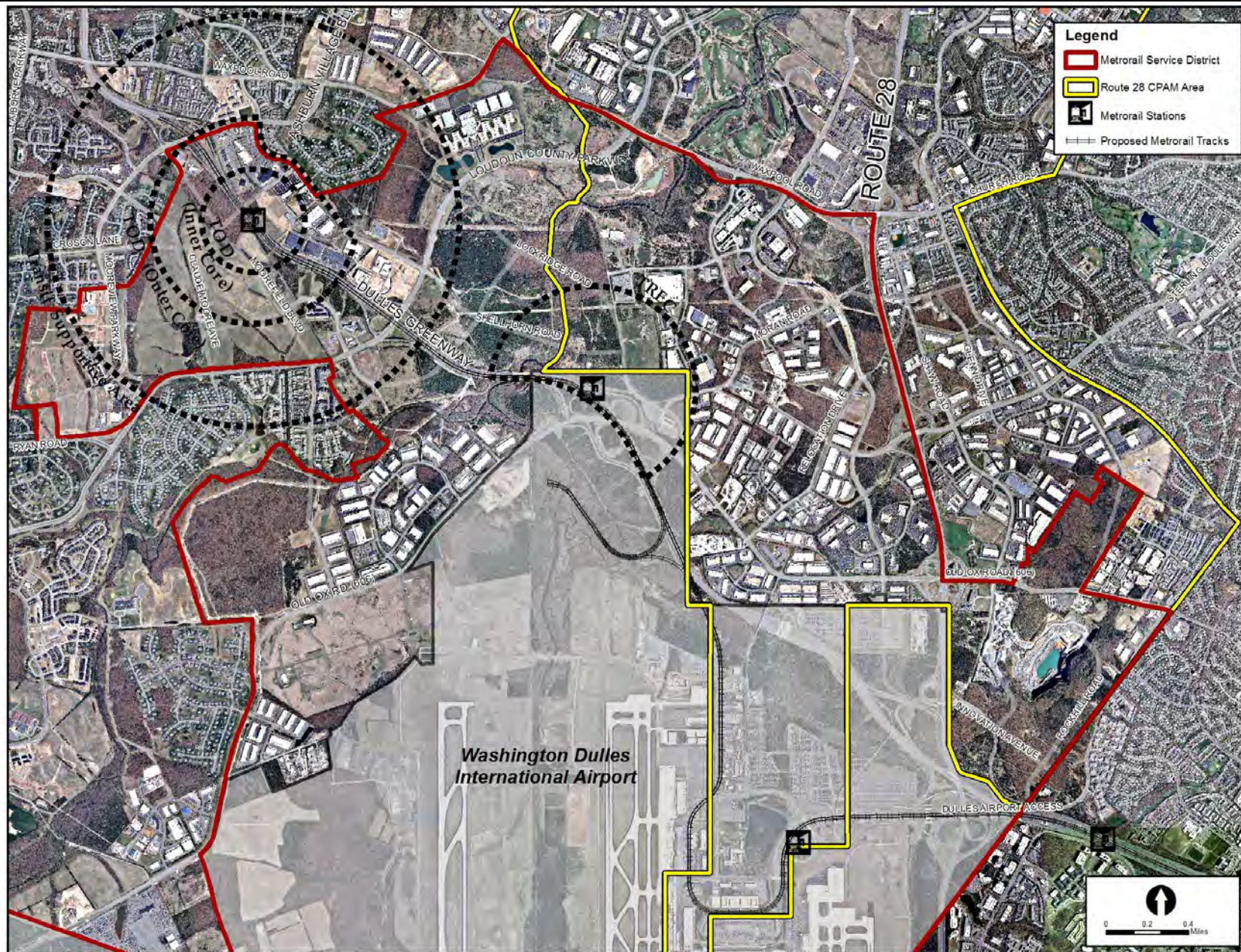


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Figure 8  
Study Area Planned Land Use





Prepared by the Department of Planning, March 2014



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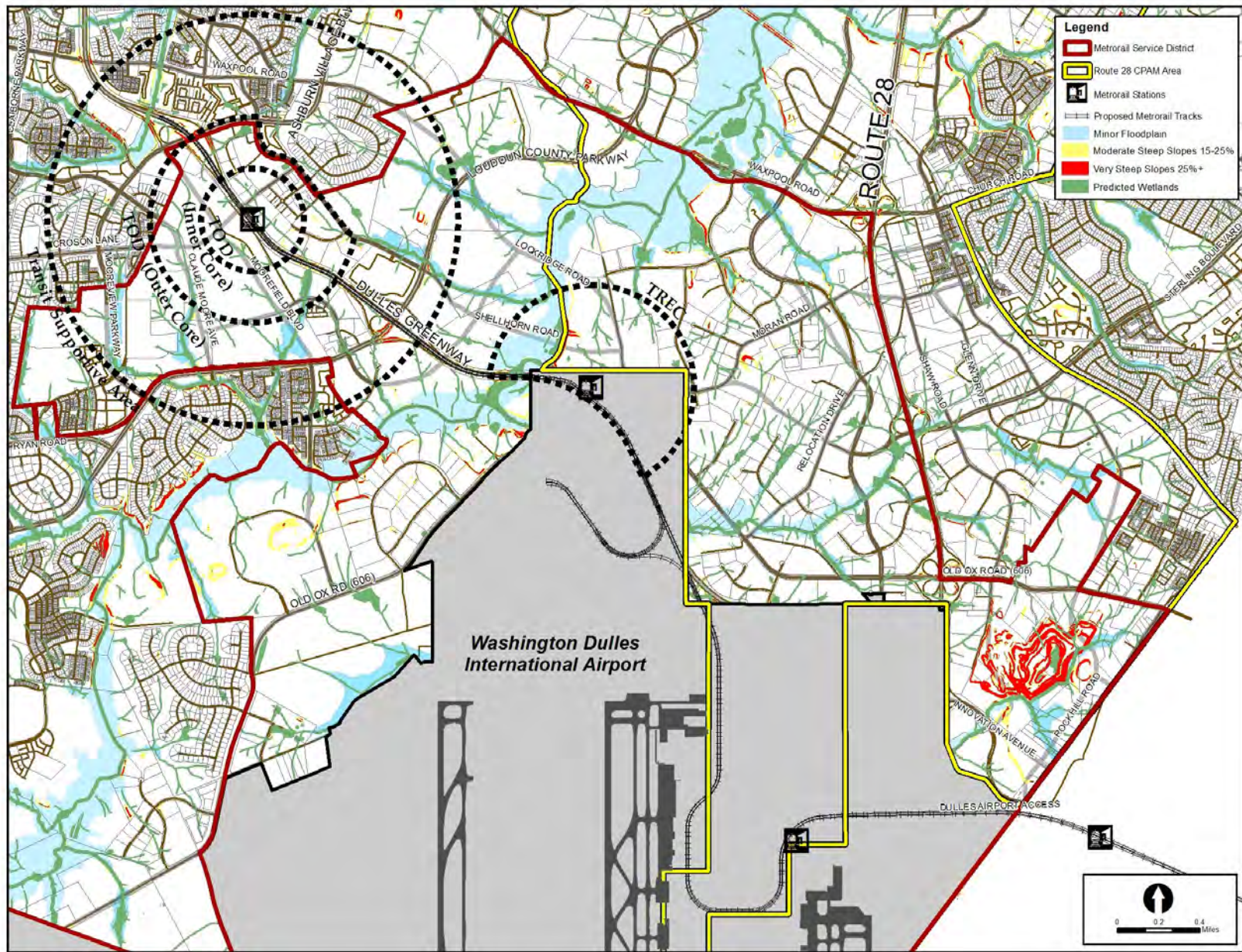
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Figure 9  
Study Area Aerial Photograph









Prepared by the Department of Planning, March 2014

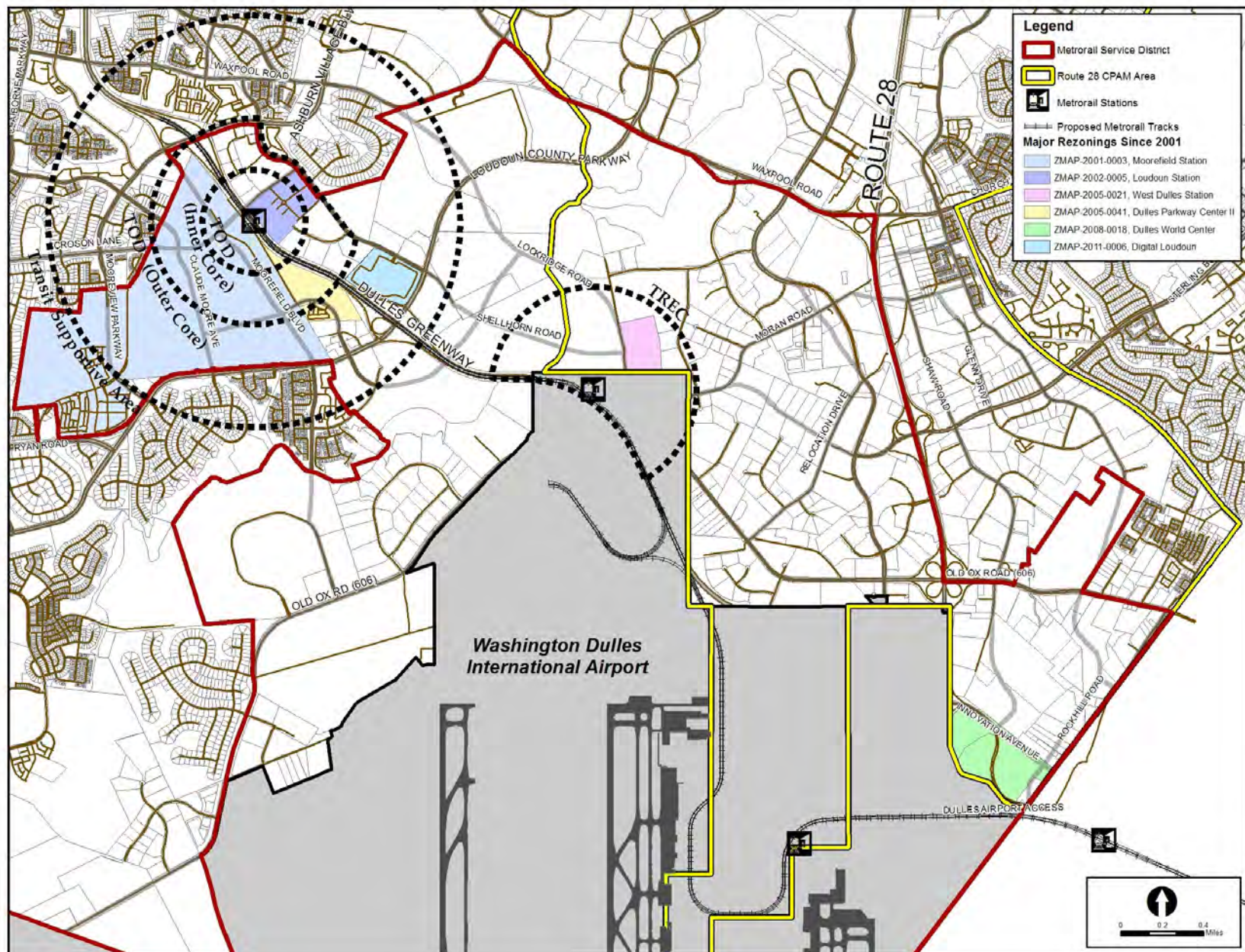


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Figure 11  
Environmental Constraints





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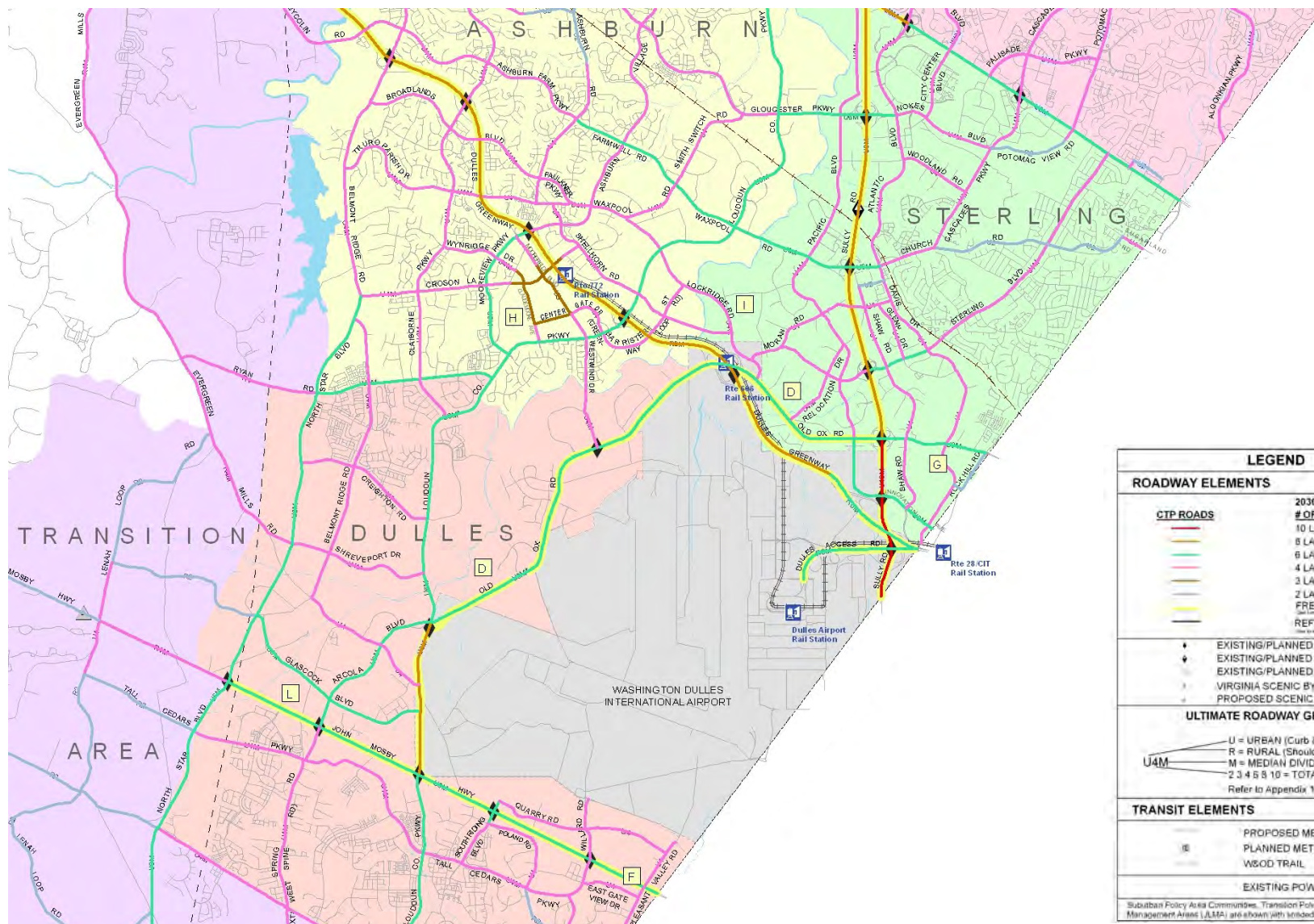
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**Figure 12**  
**Approved Projects**









LEGEND	
ROADWAY ELEMENTS	
<b>CTP ROADS</b>	<b>2030 PLANNED # OF LANES</b>
	10 LANES
	8 LANES
	6 LANES
	4 LANES
	3 LANES
	2 LANES
	FREEWAY
	REFER TO TOWN PLAN
	EXISTING/PLANNED INTERCHANGE
	EXISTING/PLANNED PARTIAL INTERCHANGE
	EXISTING/PLANNED ROUNDABOUT
	VIRGINIA SCENIC BYWAY
	PROPOSED SCENIC BYWAY
ULTIMATE ROADWAY GEOMETRY	
	U = URBAN (Curb & Gutter)
	R = RURAL (Shoulder & Ditch)
	M = MEDIAN DIVIDED
	2 3 4 5 8 10 = TOTAL # OF LANES
	Refer to Appendix 1 for Right-of-Way Widths
TRANSIT ELEMENTS	
	PROPOSED METRORAIL ALIGNMENT
	PLANNED METRORAIL STATIONS
	W&OD TRAIL
	EXISTING POWER LINES
Suburban Policy Area Communities, Transition Policy Area and Town/Joint Land Management Areas (JLMA) are shown with hatched backgrounds	



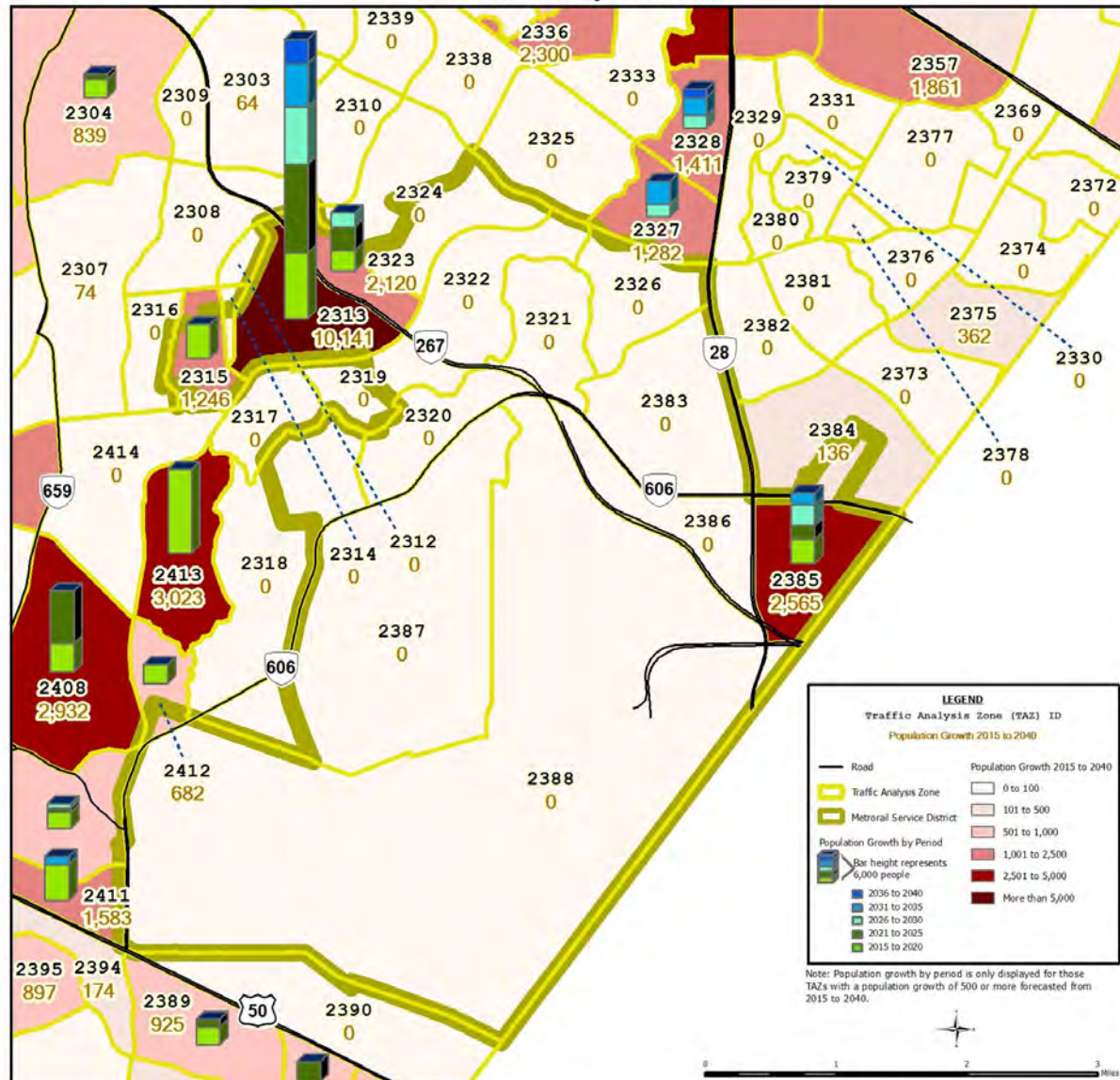
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Figure 14  
Study Area  
Countywide Transportation Plan Roads



# **Population Growth Forecasted From 2015 to 2040** **Loudoun County Round 8.3**



Produced By: Loudoun County Department of Planning, April 2, 2014.  
 Map Number 2014-123.

Source: Loudoun County Department of Planning, COG Round 8.3  
 Cooperative Forecasts, March 7, 2014.

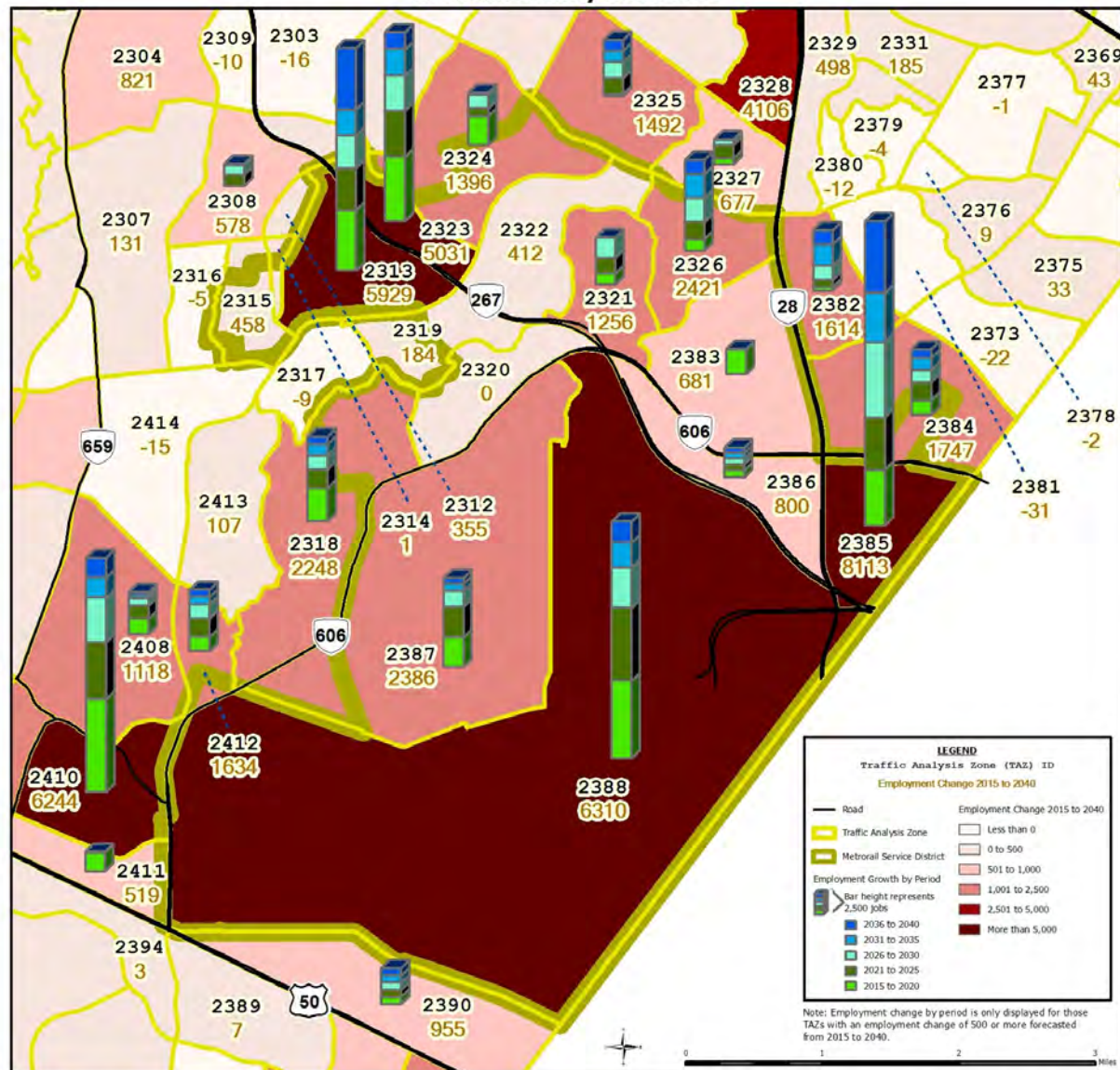


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 METRORAIL SERVICE DISTRICT STUDY

**Figure 15**  
**Population Growth**

## Employment Change Forecasted From 2015 to 2040 Loudoun County Round 8.3



Produced By: Loudoun County Department of Planning, March 31, 2014.  
Map Number 2014-124.

Source: Loudoun County Department of Planning, COG Round 8.3  
Cooperative Forecasts, March 7, 2014.

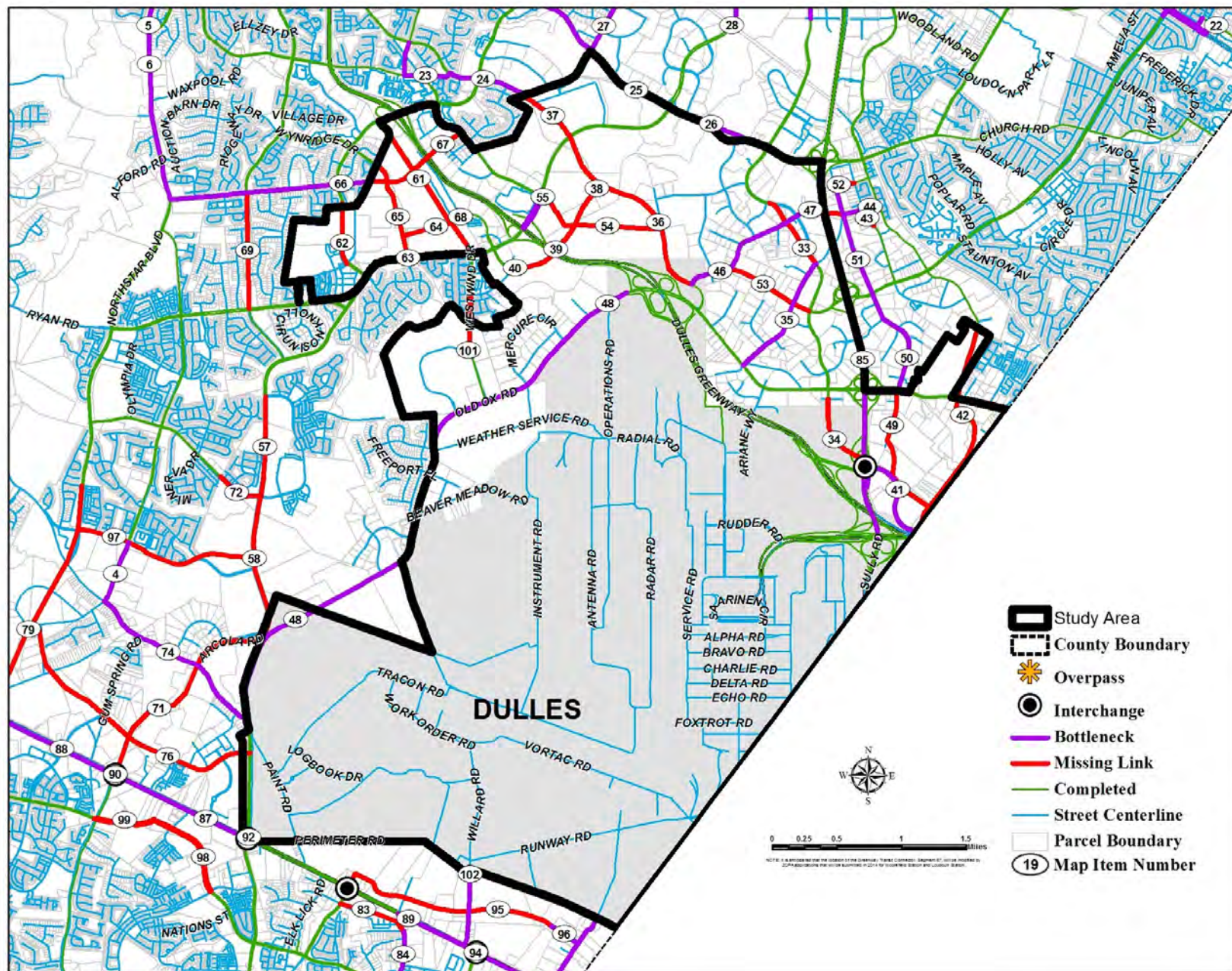


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**Figure 16**  
**Employment Change**





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**Figure 17**  
**Eastern Loudoun Transportation Study**  
**Missing Links Analysis**





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Washington



## Technical Assistance Panel Report

# Harvesting the Value of Metrorail in Loudoun County, Virginia

Sponsored by:  
Loudoun County

May 7-8, 2014



# Harvesting the Value of Metrorail in Loudoun County, Virginia

Loudoun County, Virginia

Sponsored by:  
Loudoun County

May 7-8, 2014  
Technical Assistance Panel Report

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# About ULI Washington

## A District Council of the Urban Land Institute

ULI Washington is a district council of the Urban Land Institute (ULI), a nonprofit education and research organization supported by its members. Founded in 1936, the Institute today has over 30,000 members worldwide representing the entire spectrum of land use planning and real estate development disciplines working in private enterprise and public service. As the preeminent, multidisciplinary real estate forum, ULI facilitates the open exchange of ideas, information, and experience among local, national, and international industry leaders and policy makers dedicated to creating better communities.

ULI's mission is to provide leadership in the responsible use of land and in creating and sustaining thriving communities worldwide. ULI Washington carries out the ULI mission locally by sharing best practices, building consensus, and advancing solutions through educational programs and community outreach initiatives.

## About the Technical Assistance Panel (TAP) Program

The objective of ULI Washington's Technical Assistance Panel (TAP) program is to provide expert, multidisciplinary advice on land use and real estate issues facing public agencies and nonprofit organizations in the Metropolitan Washington Region. Drawing from its extensive membership base, ULI Washington conducts one and one-half day panels offering objective and responsible advice to local decision-makers on a wide variety of land use and real estate issues, ranging from site-specific projects to public policy questions. The TAP program is intentionally flexible to provide a customized approach to specific land use and real estate issues. Learn more at <http://washington.uli.org/TAPs>.

Matt Klein  
Chair, ULI Washington  
President, Akridge

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ULI Washington

Bob Eisenberg  
Chair, Technical Assistance Panel Committee  
Principal, Heritage Property Company,  
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Deborah Kerson Bilek  
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## Acknowledgements

On behalf of the Urban Land Institute Washington District Council (ULI Washington), the Panel members and project staff would like to thank the Loudoun County Department of Planning for inviting ULI to explore the interesting and timely topic of development surrounding the future Silver Line Metro Stations. In particular, the Panel would like to thank Julie Pastor, Planning Director; Richard Klusek, Senior Planner and Project Manager for this Technical Assistance Panel, and Chris Torrible, who arranged logistics and hosting for the event. A special thanks also goes to Maggie Parker and the Comstock Companies for hosting the Panel on the TAP's first day at BLVD, a mixed-use Comstock development at the terminus of Metro's Silver Line Extension. Ms. Parker also graciously provided the cover image for this report, which was taken at BLVD, looking through the steel construction of the movie, office, and retail building at another multi-family building in the BLVD development.\* The Panel also extends its gratitude to the Loudoun County Board of Supervisors for scheduling and attending a public presentation of the Panel's recommendations. Finally, ULI Washington is also grateful to Claudia Kousoulas, who attended the TAP and collaborated with staff to produce this final report.

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\* Photo credit: davidmadisonphotography.com.

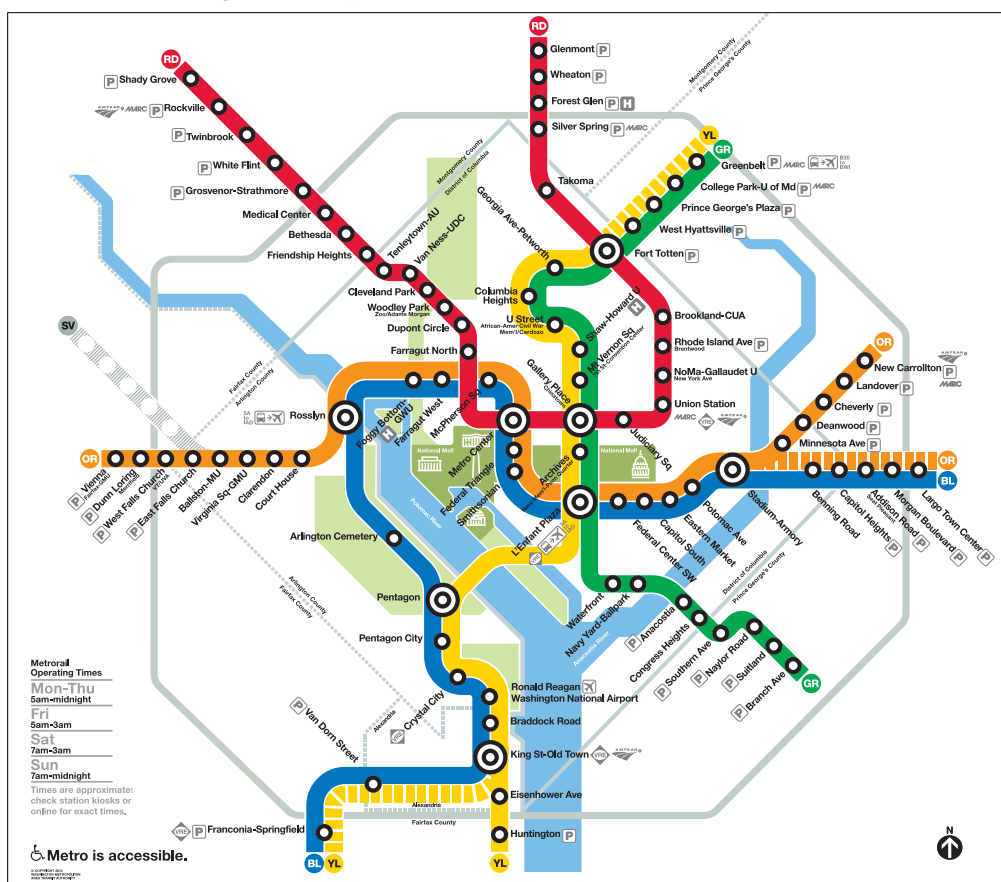


# Foreword: Panel Assignment and Study Area Background

## Panel Assignment

Loudoun County, Virginia has been planning in anticipation of Metrorail service for decades. Proposed station locations in the County and their surrounding land use have been addressed and included in County plans and policies for the past 30 years, with updates as planning and construction of the transit line has proceeded. As the extension of the Metrorail comes closer to a reality, these endeavors have become increasingly relevant and timely. The plans, policies, and designated funding surrounding the Silver Line extension – Metrorail’s new route that will connect the metropolitan core of Washington D.C. to Washington Dulles International Airport and to two additional stations in Loudoun County – represents the catalyzing force behind this TAP. Phase 2 of the Silver Line, which includes an extension of the line to the final two stations in Loudoun County, is scheduled to open in 2019, and Loudoun County is ambitiously analyzing its planning efforts to ensure that the opportunities associated with the arrival of Metrorail are maximized to the fullest extent.

**WMATA Metro System Map, as of June 2014**



The advent of Metrorail in Loudoun County presents significant economic opportunities.  
Map source: <http://www.wmata.com/rail/maps/map.cfm>.

Loudoun County's intent in seeking the assistance of a ULI Technical Assistance Panel, or TAP, is to determine if the County's Revised General Plan provides a planned land use that strikes a desired and beneficial balance between the following four criteria:

- prompt realization of tax revenues to support future Metrorail operations;
- maximizing future employment generation;
- achieving the desired land use pattern; and
- minimizing demands on the County's transportation infrastructure.

More specifically, the County requested that the Panel examine the following topics and questions throughout the one and one-half day TAP:

#### Market Realities

- To what extent is Loudoun County positioned to capture new commercial growth that has not been previously considered?
- Given local and regional conditions, what is a reasonable timeframe to anticipate significant build-out of the Study Area?
- To what extent does the planned Metrorail service and proximity to Washington Dulles International Airport offer significant competitive advantages compared with other areas in the County?
- Do the existing plans, policies and regulations inadvertently constrain opportunities to capture a new mix of uses?
- What strategies can the County employ to achieve expeditious realization of tax revenue to support Metrorail operations?

#### Infrastructure

- To what extent does the planned infrastructure meet the needs of the future market demand?
- Are there unplanned capital facilities that the County should anticipate? If so, what strategies should the County implement to accommodate these facilities?

#### Transit-Oriented Development

- To what extent does the planned transportation network adequately and efficiently serve the planned land use?
- To what extent does the network and planned land use encourage use of Metrorail?
- To what extent does the network and planned land use encourage pedestrian and bicycle circulation?

### Existing Land Use

- To what extent do existing land uses with the Study Area affect achievement of the overall vision for the Study Area?

### Planned Land Use

- Is the County's planned land use realistic given projected market conditions, infrastructure availability, TOD efforts, and the existing land use pattern? If not, what are some strategies the County can implement to achieve the overall vision for the Study Area?



# Study Area Background

## History

Loudoun County is located 25 miles west of Washington, D.C., in the Metropolitan Washington Region. The County, which was settled between 1725 and 1730, is approximately 520 square miles and includes several incorporated towns and residential communities. For more than two centuries, agriculture was the dominant way of life in the County, which had a relatively constant population of about 20,000 people. The County's pasture and farmland began to change with the 1962 opening of Washington Dulles International Airport (Dulles Airport), which drew commerce and residential development to the area.

The east side of the County is developing rapidly as a result of its proximity to Dulles Airport and to Washington D.C., its location within the Metropolitan Washington Region, and to its zoning practices that shaped a traditional suburban land use pattern. In contrast, the west side of the County, bordered by the Blue Ridge Mountains to the west and the Potomac River to the north, maintains a rural and historical environment. The County's General Plan intended for this development pattern by focusing investment in the Loudoun's eastern portion, and by preserving rural and agricultural uses and character west of Leesburg. This overall land use pattern recognizes the value of Dulles Airport as an economic generator and the County's rural past as a unique and valuable asset. Overall, the County's economy continues to grow and is responsible for a considerable share of Northern Virginia's job growth over the past few years. Several major companies in the telecommunication, information, and airline fields are located in the County.

### Loudoun County and the Metropolitan Washington Region



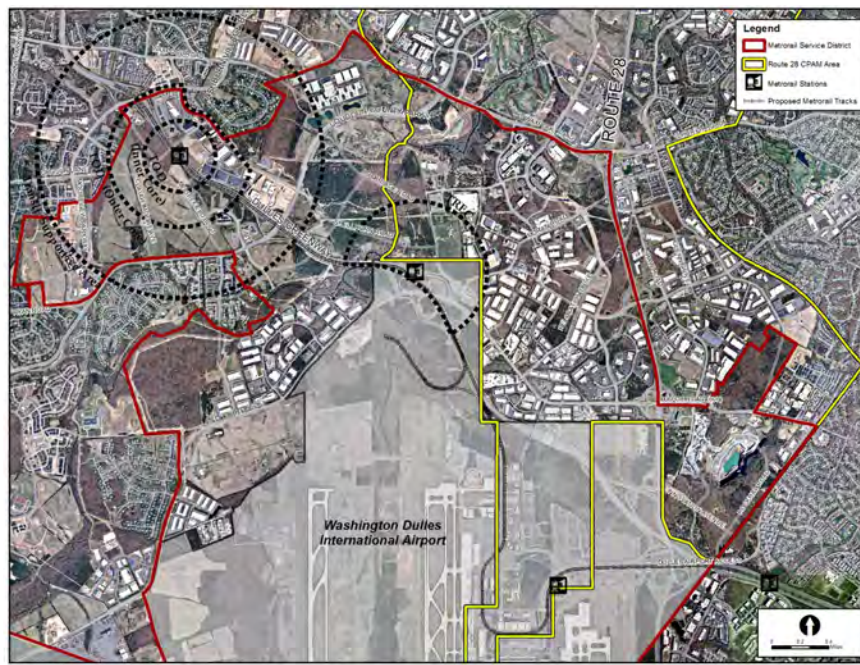
Loudoun County's regional location and proximity to Dulles Airport creates unique economic opportunities. Map source: Loudoun County.

The County's demographics tell an interesting story about its population base. According to the TAP briefing materials provided by Loudoun County planning staff, the 2013 population is estimated to be 340,112, and is expected to grow to more than 450,000 by 2040. The County has been ranked the 15<sup>th</sup> fastest growing county in the country between 2010 and 2013. Staff also informed the Panel that 79 percent of County households have children, and 57.5 percent of the population over the age of 25 hold a bachelors degree or higher. The median household income is \$117,876, one of the highest in America.

As with any major infrastructure project, the arrival of Metrorail to Loudoun County has the potential to catalyze immense change in the way people live, work, play, and travel to and within the County. Loudoun County has been a longtime supporter of the extension of Metrorail, and has established and implemented a series of programs to prepare for its anticipated arrival.

To address the anticipated growth, the Loudoun County Board of Supervisors developed several plans and policies that seek to balance land uses while also generating revenue needed to provide services to its residents. One of these initiatives is the establishment in 2012 of a Metrorail Service District to help fund construction of the future rail service. The Metrorail Service District, which served as the boundary for the TAP's Study Area, encompasses 641 parcels and 14,328 acres, including the Dulles Airport property, which is the largest property in the district. Of the stations that fall within the Metrorail Service District, two station areas served as the primary focus for this TAP: Route 606 Station and Route 772 Station.

### TAP Study Area



The TAP Study Area includes two Metrorail stations and the surrounding properties. Map source: Loudoun County.

## **Route 606 Station**

While this station is located on Dulles Airport property and therefore falls under the jurisdiction of the Metropolitan Washington Airports Authority (MWAA), the surrounding land to the north is under Loudoun County's jurisdiction. Portions of this land are currently used as a surface park-and-ride lot. This area is within the Ldn 65 Airport Impact Overlay, and its zoning prohibits residential land use. Land within a half-mile radius north of the Route 606 station area is designated as a Transit-Related Employment Center (TREC). This zoning designation encourages concentrated employment or special activity uses, with no residential component due to noise impacts.

The TREC designation recognizes the area's unique convergence of transit, proximity to Dulles Airport, and proximity to Washington, D.C., and allows up to 0.6 floor area ratio, or FAR, of non-residential development when road infrastructure is in place. A 1.0 FAR is allowed with bus service and up to 2.0 FAR with rail service. Any development must minimize environmental impacts and provide access to Metro, including pedestrian connections. The TREC also allows Special Activity Uses such as stadiums, conference facilities, and theme parks, along with their ancillary uses.

To date, there has been only one rezoning in the area, West Dulles Station, about 28 acres for a Planned Development-Industrial Park, with a proposal that calls for 485,760 square feet of flex and office uses as well as 1,895 parking spaces.

## **Route 772 Station**

Land surrounding this station within a ½-mile radius is designated for Transit-Oriented Development, or TOD – a high density mix of residential, commercial, public, and employment uses in a compact development pattern with an urban feel of short blocks, pedestrian-oriented building facades, ground floor retail, and distinctive public spaces. The County's TOD policies in this area distinguish between an inner core (¼-mile radius) and outer core (½-mile radius) with land uses diminishing in intensity farther from the station.

Three development projects have been approved in this area – Loudoun Station, Moorefield Station, and Dulles Parkway Center – and are phased to increase density and add mixed uses as transportation services come online. Moorefield Station is the area's largest project, covering 582 acres with a 69-acre core, but together the three projects are approved for more than 8,000 dwelling units and more than 12 million square feet of non-residential uses. Initial residential portions of these projects have been built and occupied, following market demand.

## **Other Conditions**

The Study Area's future development will be shaped by a number of other conditions. Of note, it is a significant crossroads of fiber optic cable providing superior high-speed voice, video, and data transmission that has prompted the construction of numerous data centers to serve business, government, and defense electronics users. These centers are prominent throughout the Study Area, but are not necessarily the highest and best use at a Metrorail station.



## Data Centers and Fiber Optic Cable in the Study Area



Data centers, which exist throughout the TAP Study Area, bring in revenue, but are not the highest and best long-term land use for properties near Metrorail stations. Image source: Loudoun County.

In addition to the significant presence of data centers through the study area, the Airport Impact Overlay District surrounding the Route 606 Station poses development challenges by limiting building height and land use. The intent of this overlay district is to ensure compatibility between Airport operations and surrounding development. The County has also committed to opening three parking structures near the Route 606 Station.

The study area also faces some environmental challenges. Floodplains associated with the Broad Run and Horsepen Run pose developmental constraints, as do smaller areas consisting of forest and steep slopes.

## Recommendations

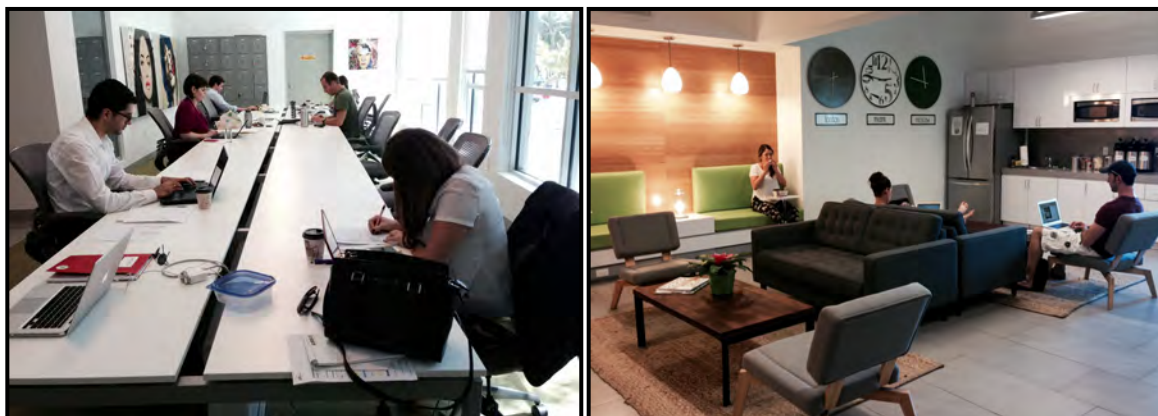
At the request of the Loudoun County Planning staff, the panelists examined a number of questions to produce a high-level “reality check” of the County’s adopted plans. The Panel’s recommendations were thematic, with the understanding the County is intending to identify opportunities for further analysis based on these initial recommendations. The Panel’s recommendations are detailed below.

### Address Market Realities

Demand for office space is shrinking as work environments change. Increasing numbers of people are working in a “third place” such as coffee shops, in shared offices, or at home. Yet, many of the County’s plans focused on the potential for office development around the station areas. In 2011, Robert Charles Lesser & Co. (RCLCO) prepared a Market and Fiscal Impact Analysis for the County that favorably supported office development around these station areas. After reviewing this study and comparing its assumptions with current market trends, the Panel advised that office development should not be the central focus around the two stations. Instead, the Panel recommended an approach that broadly analyzes each station’s potential, taking a long-term view to ensure highest and best use of the land around the stations.

According to the panel, “keynote office” should be reconsidered and deemphasized in the County because traditional office space is evolving. The 2011 GSA Workplace Utilization and Allocation Benchmark suggests that the average office space per worker has declined from 225 square feet to 175 square feet, and is trending toward 150 square feet per worker. Market trends mirror this benchmark analysis. According to the Panel, private sector office brokers in the Metropolitan Washington Region have found that office tenants are taking 18 percent less square footage than ever before.

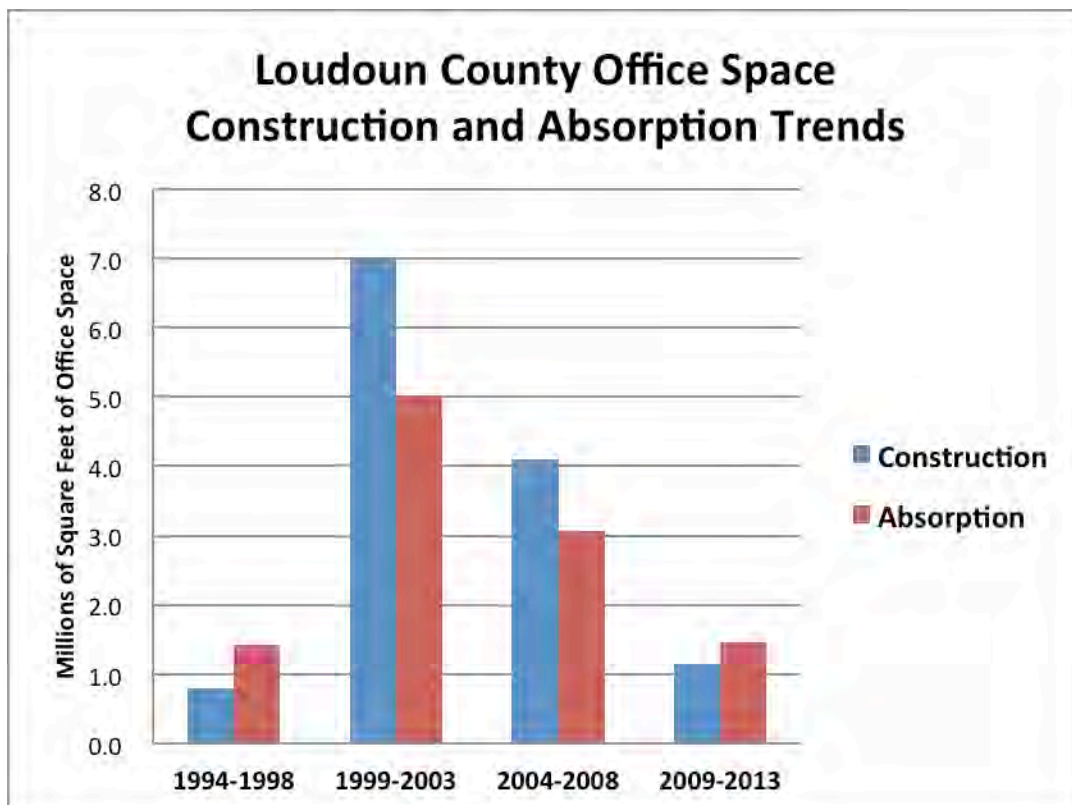
### Alternative Work Spaces



Shared and alternative workspaces offer flexibility, contributing to nationwide shifts in the demand for office space. Image source: Claudia Kousoulas, on behalf of ULI Washington.

Other factors also contribute towards a shrinking demand for office space. The recent economic recession, federal budget cutbacks, and diminished expectations for federal government contracting illustrate just a few challenges. The investment market is also showing a strong preference for walkable urban office space, in large part because the younger workforce is demonstrating a predilection towards urban locations. In the Metropolitan Washington Region, there is a pent-up demand for these types of development, evidenced by the revitalization of many D.C. neighborhoods such as U Street and the Navy Yard, and the urbanization of suburban downtowns like those in Arlington, Virginia and Bethesda and Silver Spring, Maryland.

The Panel also analyzed office space construction and absorption trends for Loudoun County over the past ten years, and strongly encouraged the County to recognize the trend of decreasing absorption for office space construction. Last year, for example, office construction in Loudoun County outstripped absorption. More specifically, the Panel predicted that the future demand for office development would be between 10 and 14 million square feet, which represents less than two-thirds of the planned 19 million square feet countywide. Given all of these factors, the Panel advised that the County reconsider its plans for major office space development around these two stations.



A market shift away from office construction requires a reexamination of the County's plan for development around Metrorail stations. Source: ULI Washington TAP Presentation.



## Welcome a Paradigm Shift: From Suburban Locations to Walkable Urban Places

According to the Panel, the region – and Loudoun County in particular – is witnessing a structural shift in development potential, and due to the County’s investment in Metrorail, could be uniquely poised to capitalize on this trend. In order to do so, the County will need to embrace a paradigm shift away from its traditional planning patterns.

Historically, after World War II, America built low-density, residential, suburban communities that were connected by cars and roads. In the last 15 years, however, the preferred development pattern has shifted towards more walkable, urban, mixed-use communities. This trend is evident in the relatively recent revitalization of the region’s transit-oriented neighborhoods like U Street in the District of Columbia, Arlington in Virginia, and Bethesda in Maryland. According to the Panel, new market demands expect a quality of place that consists of a mix of uses, including residential and retail, all within walking distance. Considering this trend, the Panel suggested that one of the future “big movers” for the region will be the redevelopment of greenfield locations and the transformation of drivable suburban areas into walkable urban places – such as in Tysons Corner, Virginia, or White Flint, Maryland.

Given the pent-up regional market demand for walkable urban places, the pending arrival of Metro, and the fact that only two percent of the built environment is added on average each year, these trends are expected to continue for at least 20 to 30 years. Therefore, the Panel embraced the redevelopment potential for Loudoun County Metro stations for mixed-use walkable urban development. The Panel recommended that Loudoun County consider and welcome this paradigm shift away from its traditional suburban development pattern, and towards creating walkable urban places near its Metro stations. Due to a variety of constraints – among them the timeframe required for effective planning and development, as well as preexisting County zoning ordinances –

the Panel suggested that Loudoun County prioritize planning for the area around the Route 772 Station before focusing on the area around Route 606 Station.

### A Look Into Our Future

**Walkable Urban Places are mixed-use development clusters** that represent the **future of the market**. There are 45 such places in the Metropolitan Washington Region. Combined, they cover 17,500 acres, and account for one percent of metropolitan area acreage, 55 percent of office square footage, and 80 percent of current office absorption. All of these places are mixed use and include a significant component of housing, ranging from 6 to 56 percent of total land uses.

Source: <http://business.gwu.edu/Walkup.pdf>.

Walkable urban places have proven to be economically powerful. According to the Panel, Reston Town Center in Virginia is the first greenfield urban community in our generation and enjoys a 60 percent price premium on a cost-per-square-foot basis over properties in other parts of Reston. Arlington County, Virginia offers the best model of an urbanized suburban community in the country, and also enjoys a substantial price premium over drivable suburban locations. The single-family houses adjacent to walkable urban places are the County’s most expensive, in large part

because they combine the benefits of suburban and urban living within walking distance. In essence, the major beneficiaries of walkable urbanism are the surrounding single-family subdivisions. Further, while Arlington's walkable urban places make up only 11 percent of the County's land area, they generate 55 percent of its tax base.

The Panel acknowledged that there may be some concerns associated with adding significant density to the area, and suggested that with distinct boundaries and place management, issues like noise and cut-through traffic can be managed. This has been the experience of other suburban walkable urban places, such as Arlington, Virginia, and Bethesda, Maryland. Furthermore, adding density and diversity through creating walkable urban places has been proven to increase the quality of life for surrounding neighbors. Continuing to build drivable suburban communities, on the other hand, contributes to a decreased quality of life, because land is developed in a manner that generates more traffic and congestion, less open space, fewer farms, and more pollution.

Adding walkable urbanism to the County does not replace or destroy the current assets. On the contrary, the County could enhance the agricultural and suburban lifestyle for which it is known by directing future growth into less than one percent of the County's landmass. New walkable urban places have a variety of benefits, including adding options to residents who want to downsize without leaving the County, providing options for the children raised in the County without going to the "city," giving residents additional entertainment options close to home, and adding additional tax revenues without increasing public sector costs proportionally – which has been the experience of Arlington County.



Arlington is an example of one of the region's most successful walkable urban locations. Source: LOCUS: Responsible Real-Estate Developers and Investors.

Metrorail has served as the catalyzing force that prompted many of the region's walkable urban places, but according to the Panel, each of these places have evolved over a long period of time – sometimes taking as long as 30 or 40 years to achieve full development. Arlington's success as a walkable urban community showcases its planning and development over several decades. Planning for Arlington began in the 1960s, with land use alternatives developed in the 1970s, land use plans for Ballston and Clarendon created in the 1980s, and plan refinements, including urban design guidelines delivered in the 1990s. A development surge in 2000 prompted the most recent 2006 plan. Development in Bethesda has followed a similar arc, with plans and policies adapting to market demands and opportunities over the past 40 years.

Given that much of the land around the station areas is undeveloped, the Panel strongly recommended that Loudoun County be prepared to create a long-term vision that for developing urban walkable communities around the station areas. The County should recognize that it may

likely take several decades to achieve its desired development goals. In considering how to create these places, the County should take the long-term view, and monitor and adjust for changing market trends. Markets move at different rates, so the County must allow developers to respond to changing market demand, while also maintaining focus on moving forward to achieve the desired development pattern.

## Develop Small Area Plans

The Panel reviewed the County's Comprehensive Plan, and determined that it is out-of-date with current market conditions and building products. Consequently, the Panel advised the County to reconsider its traditional planning approach and focus time and resources on conducting a broad visioning effort. Once this visioning effort is complete, the Panel recommended that the County develop small area plans for both Metro station areas. The Panel emphasized that integrated planning is essential to achieving a successful destination environment, and requires close attention to design details, including the relationship of buildings to streets, land use balances, particulars of building types, and ways to create walkability. Each recommended small area plan should strive to create a cohesive place, and should be used to set a template for the future.



Small area plans outline transportation, public space, and development patterns to create a desired place.  
Source: Arlington County.

In developing small area plans, the Panel advised that the County create three-dimensional maps using color and pictures, which will establish clear expectations for both public and private investment and for residents. Such plans could also be used as a marketing tool, according to the Panel. County staff should strategically consider the land use, public spaces, and transportation patterns defined in these plans. The Panel also advised that the County refrain from simply approving projects that are adjacent to each other without considering the overall plan and the greater context for such projects. Furthermore, the Panel emphasized that small area plans should include a coordinated transportation map that outlines local and regional roads along with transit, pedestrian, and bicycle routes and connections. A small area plan could also include such elements as urban design structure, edge conditions and treatments, and define the desired character nuances at Metrorail stations, away from stations, and between stations.

The Panel emphasized that the County would be wise to maximize the amount of developable, tax-generating, walkable urban land near these two stations. This land will prove to provide the highest



fiscal benefits to the County in the future. Most – though not all – walkable urban development in the County will be in these station areas – even though these areas represent a small fraction of the County landmass.

### **Use of 3-Dimensional Images in Small Area Plans**



Small Area Plans, such as this one for Clarendon in Virginia, can be characterized by their use of color and three-dimensional perspective. These plans illustrate the relationship between uses and set a common vision. Source: Arlington County.

### **Coordinate and Support Transportation and Infrastructure Investments**

One important component of a small area plan is a complete map of the transportation network. Accordingly, the Panel strongly recommended that all relevant owners and agencies – local, regional, and state – collaborate to create a comprehensive map of the transportation facilities that are both in place and needed to accommodate future growth and development. Such an exercise will result in identifying and articulating expectations for both public and private investment. The Panel advised that a coordinated transportation network map should include information about the character of the streets that compose the network – including pedestrian and bicycle facilities. A complete transportation network map will also identify gaps and help align transportation investment with the overall vision for the area.

Throughout this exercise, the Panel advised the County to consider and plan for the specific kinds of facilities that would be needed to complement the desired development pattern. Complete streets – those that safely and adequately accommodate motorized and non-motorized users in a manner appropriate to the function and context of the facility – are a critical component of creating a defined place.<sup>1</sup> The Panel urged the County to consider and plan for pedestrian and bicycle accessibility to the station areas, and recommended that the County review the results of the forthcoming study sponsored by the National Capital Region Transportation Planning Board's Transportation/ Land-Use Connections Program titled, "Enhancing Bicycle/Pedestrian Connectivity Around Future Metro Stations." This technical assistance study, which is due as a final report in summer 2014, seeks to identify missing and deficient bicycle and pedestrian facilities around both the Route 606 and Route 772 station areas. The study will develop a list of priority bicycle and pedestrian facilities within a three-mile radius of the future stations to enhance multimodal connections to key local and regional facilities.<sup>2</sup>



A complete map of the existing and proposed transportation network – such as this mock-up, which was drawn during the TAP– helps identify gaps. Source: ULI Washington.

Parking needs should also be addressed as part of this comprehensive network map. The Panel advised the County to refrain from locating parking structures on the most valuable land at the stations. Instead, the Panel recommended a phased approach, where the land closest to the stations could be developed as surface lots that can be easily transformed to tax-generating private development that meets the evolving needs of these places over time. Parking decks should be available for many different uses. In addition to accommodating traditional commuters, parking should be used in the evening and on weekends for restaurants and movie theater patrons, and for apartment and condominium users overnight. The Panel emphasized that the costs of these structures are too great; failing to maximize the use of these parking assets would be detrimental.

Overall, the Panel emphasized that infrastructure investment contributes to defining a place and establishes expectations. The County should use public investment from various sources (some of which could potentially be recaptured through proffers) to fill in road gaps and assist in creating sense of a place. Infrastructure investments should also incentivize the highest and best uses closest to the Metro stations.

<sup>1</sup> For more on Complete Streets, including information on the Complete Streets Policy for the National Capital Region, which was adopted by the Metropolitan Washington Council of Governments on May 16, 2012, visit: <http://www.mwcog.org/uploads/committee-documents/mV1dXI9e20120510092939.pdf>.

<sup>2</sup> For more information, visit: <http://www.mwcog.org/transportation/activities/tlc/program/projects.asp#Loudoun>.

## Do Not Fear Multi-Family Housing

There is a myth that building multi-family housing in walkable urban places will result in overwhelming the public schools with children. This myth is particularly a concern regarding rental multi-family housing. The experience in Arlington County is exactly the opposite of this mythical fear. In 1980, the future walkable urban places in Arlington, which occupies 11 percent of the County landmass, were primarily along Wilson Boulevard to the west of Rosslyn (or the RB Corridor) and along Jefferson Davis Boulevard. This 11 percent of the County land generated 20 percent of the tax revenues, as strip commercial development along these corridors were becoming obsolete – just as strip commercial development is projected to do in outer suburban locations over the next generation.

Today, the now-walkable urban 11 percent of Arlington County generates 55 percent of the County's tax revenues. The majority of the growth has been rental and for-sale multi-family housing. The school generation rate per household from the walkable urban places have been 1/13th the rate of the single-family for-sale housing in the County (in other words, single family neighborhoods generate 13 times the children per household as multi-family households in walkable urban places). Overall, the majority of growth in Arlington County for the past 30 years has been multi-family housing – both rental and for-sale – and these housing units have been paying school taxes, but sending students to the public schools at only eight percent of the rate that the single-family for-sale housing has been generating students. The multi-family housing has been subsidizing the public schools, which is one reason that Arlington County schools are among the best in the Commonwealth of Virginia.

## Flexibility in Zoning

The Panel emphasized that mixed-use places are the market future, and cautioned that Loudoun County's plans and policies should avoid creating a "monoculture" land use pattern. Communities with walkable urban places have found that the cost of residential services can be offset with the revenue generated by retail and restaurant uses. A monoculture of residential or commercial uses cannot serve the entire community, and will fail to attract the ever-desirable 18-35 "millennial" demographic, which is looking for an urban-feel environment that offers a mix of housing and lifestyle options. Zoning flexibility will be necessary to achieve this desired mixed-use.

### Floor Area Ratio vs. Dwelling Units per Acre

**Floor area ratio**, or FAR, the **ratio of allowable building area to lot size**, is a fundamental dimensional standard of a zoning code. It **determines potential development and value**. The FAR can also be distributed to create a pattern, orienting bulk and density along major arterials and becoming less intense along smaller, residential streets. **Dwelling units per acre**, or DU, by contrast, **measure impact**, such as the number of residents will require services.



The Panel cautioned that market demand often shifts in unanticipated ways. Phasing, the ability to shift uses, and a faster process (that is, quicker than the current two to three years) will allow projects to respond to market demand. The County currently uses the standard of dwelling units per acre, or DU, which is limited because it cannot accommodate some market realities, such as smaller dwelling units in residential projects or a mix of uses. Using floor area ratio, or FAR, to measure residential and commercial density can help create a more predictable form and will help shape the station areas without encouraging developers to simply build the most number of units possible. Within the FAR limits, the Panel recommended that the County allow developers to move between land uses to respond to changing market demands.

In addition, because the trend towards walkable urban development is only 15 years old, it is not universally understood what the optimal mix of office, retail, rental housing, hotel, and for-sale housing should be. This reinforces that plans should allow flexibility to respond to market demands. Since housing represents about 60 percent of the square footage in real estate, the Panel emphasized that there should be ample allowance for residential development – both rental and for-sale – at the station areas.

### **Focus Resources Strategically**

The Panel acknowledged that its recommendations calling for a detailed planning process would require considerable staff time and resources. The County should therefore provide designated staff that is solely responsible for monitoring planning and development to ensure that Loudoun County reaches its goals. The Panel also recommended that the County consider hiring new staff who will be charged with developing the recommended small area plans and managing the County's relationships with developers. As an example, in Montgomery County, a new position was created in the Office of the County Executive to manage the development process in the White Flint area. This position creates a single point of contact for the complex County planning process. This employee has a clear understanding of the vision of the area and the complicated interactions between the public and private sector that are required to implement a complex and nontraditional type of development. Over the long term, the investment in this staff person will be paid back many times through the increased tax revenue that will be realized from the new development.

The Panel further recommended that the County consider establishing a Business Improvement District, or BID, and/or partner with other stakeholder organizations that will support placemaking and management, and take responsibility for operating the newly created places. As part of this arrangement, the Panel suggested that there be a place manager for each of the station areas, and that the property owners would assume the operating costs for the place manager. While the County would continue to provide required public services (such as public safety), the private sector place manager would supplement these services and add many more (such as festival management) over time.

### Case Study: Capital Riverfront BID

The Navy Yard is one of the District of Columbia's oldest neighborhoods. Over time, businesses and residents moved on, and the Navy Yard lost its community identity. Beginning in 2000, the District's Anacostia Waterfront Initiative sought to define a new future for this waterfront area. With a broad scope and detailed planning, and with coordinated public and private investment, the Capital Riverfront has become a redeveloped and attractive neighborhood, which is overseen by the Capital Riverfront Business Improvement District. The BID undertakes cleaning and maintenance, safety and hospitality, marketing and special events, economic development, and coordination and advocacy for public improvements to continue building a community. To learn more, visit: <http://www.capitolriverfront.org/>.

### Create a Loudoun Place and Brand

Creating a place goes beyond the physical character and function, and entails communicating a perception. Part of creating a place involves branding the destination. As with the Navy Yard, the NoMa neighborhood in the District of Columbia – so named because it lies **North of Massachusetts Avenue** – has become a defined place and destination. The combined efforts of private developers, the District government, and the NoMa BID have created amenities and programming, and have coordinated public and private investment to create value for all involved. One important catalyst for this development was the shared public and private investment in a new infill Metro stop for the area, which opened in 2004.<sup>3</sup> This same opportunity exists for Loudoun's future Metrorail stations.

To capitalize on this opportunity, the Panel advised that the County prioritize adjusting the way the public perceives the Route 606 and 772 stations by renaming each of them in a way that reflects their unique character.<sup>4</sup> The result of this renaming would be a slow but certain paradigm shift – away from obscure numbers that mean little to those inside and outside the County, and towards embracing the potential of the future station areas. This paradigm shift would, in turn, foster a new identity for the areas around the stations. The metro station that helped catalyze the NoMa neighborhood is now named the NoMa-Gallaudet station.<sup>5</sup>

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<sup>3</sup> <http://www.nbcwashington.com/news/local/NoMa-New-York-Avenue-Metro-Station.html>

<sup>4</sup> The Panel acknowledged naming Metro Stations may fall outside the County's jurisdiction, but compelled the County to influence the naming process as much as possible. The Panel made suggestions for station names in their recommendations, but acknowledged that these specific names could be altered based on the County's desire to create a different identity for its station areas.

<sup>5</sup> This metro station was formerly named "New York Ave-Florida Ave-Gallaudet U stop," but was renamed in 2011 to be consistent with a WMATA policy to have a well-known primary name for each metro station that is not longer than 19 characters. Placemaking, creating neighborhood identity, and drawing riders to NoMa was part of the renaming strategy. ([http://www.washingtonpost.com/local/in-renamed-metro-stop-noma-hopes-for-hipper-identity/2011/11/03/gIQA03RvjM\\_story.html](http://www.washingtonpost.com/local/in-renamed-metro-stop-noma-hopes-for-hipper-identity/2011/11/03/gIQA03RvjM_story.html)).

## **Dulles Center International Station**

The Dulles Center International, or the DCI Station, is the Panel's proposed name for the Route 606 Station. Given that the DCI Station is just minutes away from the airport, the Panel suggested that the area near the station be developed into a convention space along with mixed uses as a way to attract both national and international audiences who may enter the region via Dulles Airport. This recommendation is rooted in a unique opportunity defined by the preexisting constraint on area residential development because of the noise from the airport, combined with the Panel's vision that the Silver Line terminus be the County's primary focal point for mixed-use and transit-oriented development. The Panel likened this recommendation to the recent development of a convention center at National Harbor in Maryland, though the Panel acknowledged that a convention center at the DCI station may not share the scale with the one in National Harbor, and would likely serve a smaller market.

### **Gaylord National Resort and Convention Center, National Harbor**



The DCI Station at Route 606 is just minutes from Dulles Airport, potentially connecting it to an international market. This, combined with the existing TREC designation, caused the Panel to recommend development of a convention center space around the station. Image source: <https://www.eventbrite.com/e/namc-45th-national-conference-a-legacy-celebration-new-roads-to-excellence-tickets-10395680761>.



## Blue Ridge Gateway Station

The Panel suggested renaming the Route 772 Silver Line terminus as the Blue Ridge Gateway Station. This station would connect riders from throughout the Metropolitan Washington Region to the unique and agrarian experience of Loudoun County, including access to more than 35 wineries, historic properties, quaint bed and breakfasts, and the rural landscape. The Panel envisioned a wealth of opportunity for this gateway station – including the potential for Loudoun to boost its tourism economy by serving as a springboard destination for Washington-area wine connoisseurs. By positioning the Silver Line terminus as a gateway to greater Loudoun County, the Metrorail can serve not only commuters, but also leisure riders who are drawn to Loudoun’s unique assets.

### Branding the Blue Ridge Gateway Station



With strategic branding and careful attention to creating distinct destinations, Loudoun County can offer the region and its residents the best of both worlds—urban and rural. Image sources: <http://www.loudounfarms.org/index.aspx?NID=134> (left); <http://georgesmill.com/> (right).

## Conclusion and Next Steps

Loudoun County is at a key junction in time as its historic agricultural roots come face-to-face with state-of-the-art infrastructure investment. As plans for the Silver Line's extension to Loudoun County continue to materialize, opportunities for the County to connect to the Metropolitan Washington Region and to realize its development potential will become a timely reality.

Taken together, the TAP's recommendations cultivate an approach that encourages close and careful study of the final two station areas along the Silver Line to determine each one's particular opportunities. The Panel recommended developing a distinct and detailed character for each station through visioning, small area planning, branding and marketing, and the creation of a place. Through these efforts, the County can help communicate expected change to residents and manage expectations for both public and private sector investment. Accomplishing this will require zoning flexibility and consideration of market forces to determine which uses are most suited for the station areas over the interim- and long-term.

The Panel understands that the County intends to use these recommendations as a means to identify areas for further analysis. Some suggestions for deeper study could include any of the following:

- Conduct best practices research for such topics as (1) developing greenfields into walkable urban places; (2) development surrounding airports; (3) zoning codes that foster walkable urban places; (4) successful development of a complete transportation network map; and (5) the formation and impact of Business Improvement Districts on newly created places.
- Conduct a broad visioning effort that includes property owners, community members, public agencies, and other stakeholders to articulate and refine the shared goals for planning and development around the station areas.
- Develop small area plans for the station areas, focusing primarily on the Blue Ridge Gateway Station, and secondarily on the Dulles Center International Station.
- Analyze existing staff capacity and compare with the future capacity needs in order to anticipate new hiring needs, and to appropriately allocate planning resources and staff time.
- Conduct a market study and best practices research on successful ways to brand newly developed walkable urban station areas.

The Panel congratulates the County on investing in the Metrorail, but emphasized throughout the TAP that the goal of investing in Metrorail should *not* be to move people. Rather, the goal of investing in Metrorail should be economic development and enhancing the overall quality of life for residents – the *means* of which is moving people. The underpinning goals for station area planning should be the enhancement of the quality of life, and the economic development potential – which generates tax revenue – of the small amount of land surrounding the two stations.

Through strategic visioning, embracing a paradigm shift in development towards walkable urbanism, and careful coordination, the Panel is confident that Loudoun County can maximize forthcoming development opportunities and create a lively and dynamic destination while maintaining the agricultural and suburban assets that residents of the County love today.

## About the Panel

### **Richard Perlumtter, Chair**

Argo Development Company

Mr. Perlmutter is a principal and co-founder of Argo Development Company in 1996. The firm is based in Rockville, Maryland and has expertise in developing retail, office, residential, and urban mixed-use projects. Since its inception, Argo has acquired or developed over three million square feet of commercial and residential space in the Washington, New York, and Boston metropolitan areas. Over Mr. Perlmutter's professional career, he has developed and managed property valued at over \$2 billion. The firm is strategically aligned with the Foulger-Pratt Companies and develops and acquires real estate primarily for its own account.

Prior to founding Argo, Mr. Perlmutter was a senior vice president of South Charles Realty and South Charles Investment, both subsidiaries of Bank of America. He was responsible for over 500 transactions totaling over \$1.5 billion of real estate. Among his major projects, he was responsible for several master-planned communities and extensive office projects throughout the mid-Atlantic and Southeastern United States. His expertise ranges from financial engineering to multi-phase project management. Mr. Perlmutter has experience working as a lawyer for the United States Senate and real estate developer for several small and large real estate companies. He is active in community and professional affairs. He is a trustee of the Urban Land Institute, governor of the Urban Land Institute Foundation, chair of mission advancement of the Urban Land Institute-Washington District Council, board member of the Robert H. Smith School of Business of the University of Maryland, board member of USA Canoe/Kayak, and board member of Carl M. Freeman Associates. He also is a member of the District of Columbia Bar.

Mr. Perlmutter has a B.A. in Environmental Design from the State University of New York at Buffalo, graduate study at the University of California, Los Angeles and a J.D. from the School of Law, University of Oregon.



**Bob Brosnan**

Arlington Department of Community Planning

Mr. Brosnan has been the Planning Director for Arlington County, Virginia since 1988 and has worked in Arlington since 1977. He recently was appointed the Director of the Department of Community Planning, Housing and Development. Arlington County is recognized both nationally and internationally as one of the most successful examples of integrating transit with development. The Planning Division is responsible for guiding and regulating Arlington's short and long-range development by working with the community to develop plans, analyze development and rezoning requests in the light of those plans, provide zoning and code enforcement activities, and review and issue permits for construction of residential and commercial development. In his capacity as the Director of the Department of Community Planning, Housing and Development, Mr. Brosnan is also responsible for Housing, Building Permitting and Inspection, Zoning and Neighborhood Planning.

Mr. Brosnan has served on several ULI TAPs, including Wheaton Metro Station Area Plan and the College Park Metro Station Plan, and has been an active participant in the Metropolitan Washington Council of Governments Region Forward Coalition. He has also represented the State Department in trip to South Korea, India and Bangladesh to talk about smart growth and sustainability. Mr. Brosnan received a Master's of City and Regional Planning from Catholic University and a BA in Business Administration; Management from Georgetown University.

**Andrew K. Brown**

Stanford Properties

Mr. Brown directs all activities of Stanford Properties, LC, a real estate investment and development company based in Bethesda, Maryland. Mr. Brown has acquired and developed over twenty-five residential and commercial projects with an aggregate value in excess of \$250 million since the company's founding in 1992. His recent projects include conversion of an underperforming retail big-box center into a high density residential condominium project; development of a traditional grocery anchored retail center; and development of a 50-acre mixed-use residential and retail town center. Mr. Brown directs site selection, acquisition, governmental entitlements, financing, construction, leasing and ongoing asset management of completed projects. Prior to founding Stanford Properties, Mr. Brown was the Director of Retail Development for Baier Properties, Inc. where he oversaw development of numerous retail and residential land development projects, and prior to that held positions in acquisition and project management with two Washington-based real estate firms.

Mr. Brown received his B.A. in Economics from Stanford University in 1983. He is an active member of the Urban Land Institute where he is an Officer of the Washington District Council's Advisory Board.

**Mark Jinks**

City of Alexandria

Mr. Jinks is a Deputy City Manager for the City of Alexandria, Virginia. He is responsible for overseeing and facilitating the City's land use planning, zoning, historic preservation, transportation, environmental protection, infrastructure construction management, code administration, affordable housing and museum functions. His responsibilities cover the areas of economic development, project finance and private real estate development. Mr. Jinks previously served for ten years as the City of Alexandria's chief financial officer, and prior to that served for ten years as the Director of Management and Finance for Arlington County. For Arlington County, Mr. Jinks also served as Budget Director.

Mr. Jinks has served as the chair of the Alexandria-Arlington Waste-to-Energy facility board, and on the boards of public pension funds for both Arlington County and the City of Alexandria. Mr. Jinks has served as a member the Washington Metropolitan Area Transit Authority Joint Development Task Force, and the Client Advisory Board for Prudential Retirement. He has served as an economic development and financial management consultant to the cities of Warsaw and Krakow, Poland. Mr. Jinks holds a BA and an MPA from The Pennsylvania State University.

**Christopher B. Leinberger**

Charles Bendit Distinguished Scholar and Research Professor of Urban Real Estate  
Chair, Center for Real Estate and Urban Analysis, George Washington University School  
of Business

Mr. Leinberger is a land use strategist, teacher, developer, researcher and author, balancing business realities with social and environmental concerns. In addition to his GWU affiliation, Mr. Leinberger is President of Locus, Responsible Real Estate Developers and Investors; a Nonresident Senior Fellow at Brookings Institution in Washington D.C.; and a Founding Partner of Arcadia Land Company, a New Urbanism and transit-oriented development firm. Mr. Leinberger's most recent book is *The Option of Urbanism, Investing in a New American Dream*. He is the author of *Strategic Planning for Real Estate Companies* and has contributed chapters to 12 other books. He is an Op-Ed Contributor to the *The New York Times*, writes regularly for *The Atlantic Monthly* and numerous other magazines. CNN, National Public Radio, Atlantic Cities Channel, the Washington Post, among others, have profiled him. Mr. Leinberger is a graduate of Swarthmore College and the Harvard Business School and lives in Dupont Circle in Washington, D.C.

**Anita Morrison**

Partners for Economic Solutions

With more than 35 years in development consulting, including the last five years as Founding Principal of Partners for Economic Solutions, Ms. Morrison has specialized in public/private partnerships, real estate advisory services, redevelopment strategies and economic impact analysis. Her work with major transit-oriented development (TOD) spans three decades, including analysis of alternative corridors for extension of Washington's transit network, the economic and fiscal impacts of Metro's Green Line, the economics of developing major downtown and neighborhood transit stations, market and financial feasibility of TOD at commuter rail stations, and potentials for inter-modal transit stations. She has been involved in a wide variety of TOD feasibility analyses and development strategies for station area and corridor plans for the District of Columbia, WMATA, Prince George's County, Arlington County, the Northern Virginia Transportation Commission and the State of Maryland.

Ms. Morrison worked with the Maryland Department of Transportation in structuring the public/private partnership for redevelopment of Baltimore's State Center. This major transit-oriented development will replace a dated and sterile single-purpose office district with a \$500 million, 3.7 million square-foot mixed-use development that incorporates State and private office space; retail and entertainment facilities; market-rate, workforce and affordable housing; and extensive new public open space and streetscaping.

**Stephanie Pankiewicz**

LandDesign

Ms. Pankiewicz is a Partner and Landscape Architect at LandDesign based in Alexandria, VA. As a professional landscape architect and dedicated community advocate for greenways, complete streets and green infrastructure, Stephanie is focused on integrating economically viable and environmentally sustainable community and site design through all of the projects on which she participates. Her current work includes several large-scale mixed-use urban design/landscaping architecture projects in the D.C. Metropolitan Area. Ms. Pankiewicz also has led many public planning projects with a community participation process, including an extensive community involvement process for the City of Asheville's signature River Arts district multi-modal transportation project which consists of complex NEPA, State, and federal agency submittal and review requirements balanced with other design factors.

Ms. Pankiewicz earned a Bachelor of Landscape Architecture from the University of Georgia with honors and is a registered landscape architect in North Carolina, South Carolina, Georgia, Tennessee and California. She is also a member of several professional organizations, including the American Society of Landscape Architects and the Urban Land Institute.



**Laura Rydland**

The Louis Berger Group

Ms. Rydland is an urban planner specializing in land use and multi-modal transportation planning with experience in transportation analysis, urban design, master planning, community engagement, mapping, research, event planning, and architecture. Ms. Rydland's current work includes leading the development of multiple transportation management programs for naval installations in the D.C. area, conducting transportation research and analysis, writing transportation sections of environmental studies and transportation reports, conducting interviews of personnel for best practices reports and planning documents, and supporting visioning and planning projects involving multiple stakeholders or advisory committees. Her prior experience includes the development of master plans for planned communities and mixed-use area developments, site planning and design work for many Transit Oriented Development (TOD) projects, planning and schematic design of redevelopment projects, and development of design guidelines for urbanizing suburban areas.

**Jamie Weinbaum**

The JBG Companies

Mr. Weinbaum is a Development Manager at The JBG Companies, where he focuses on mixed-use, transit-oriented residential/retail projects throughout the Washington region. Mr. Weinbaum currently leads the development of Twinbrook Station, a public/ private partnership with WMATA to develop 26 acres of surface parking lots around the Twinbrook Metro Station. He also leads the development of Fort Totten Square, a TOD project in Northeast D.C. that will include 345 market rate apartments, over 130,000 square feet of retail, and will be anchored by an urban-format Walmart.

Prior to joining JBG, Mr. Weinbaum served as the Director of the District of Columbia Office of Zoning from August 2009 until August 2011. He led the independent office in providing professional support to the Zoning Commission and the Board of Zoning Adjustment. Prior to his appointment as Director by the Zoning Commission, Mr. Weinbaum worked in the D.C. Office of the Deputy Mayor for Planning and Economic Development, where he focused on large-scale infrastructure, parks and transportation projects. He also served as a liaison to several Business Improvement Districts and supported the District's business attraction and retention initiatives. Before his employment with the District of Columbia government, Mr. Weinbaum spent time in the private sector as a developer and investor, as well as in private practice as a contracts and construction attorney. Mr. Weinbaum received an undergraduate degree from Wake Forest University and a law degree from The George Washington University School of Law.

To: Loudoun County Board of Supervisors  
From: Loudoun County Economic Development Advisory Commission  
Date: July 11, 2014  
Subject: EDAC Recommendations for the Future of Development at Silver Line Rail Stations

## **Background**

The mission of the Economic Development Advisory Commission (EDAC) is to promote the long-term economic growth and development of Loudoun County in a way that is economically sustainable and results in the expansion of its commercial tax base. Towards that end, the EDAC created a Silver Line Ad Hoc Committee to provide an economic development focused viewpoint to the Board as the Silver Line CPAM-related activities are undertaken.

The Ad Hoc committee met a number of times this spring to develop these recommendations as well as participate as a Stakeholder in the ULI Technical Advisory Panel Phase 1 process. As a group and individually, we have reached out and heard from landowners, developers, commercial real estate brokers, employers, representatives from the airport authority and county planning and economic development staff. Throughout the process, we focused our work on the economic development and commercial tax base related aspects of the four goals for the Silver Line CPAM outlined by the Board of Supervisors:

- Prompt Realization of Tax Revenues to Support Future Metrorail Operations
- Maximizing Future Employment generation
- Achieving the desired land use pattern
- Minimizing Demands on the County's Transportation Infrastructure

## **Recommended Actions**

The ULI panel made a number of significant observations regarding changes to the commercial property market that have occurred as recently as the last five years. Taking action without incorporating these observations would be setting Loudoun properties up to fail by sitting undeveloped and empty for the foreseeable future, severely diminishing the ability of the tax district to generate revenue.

Because the Silver Line extension presents the single largest economic development opportunity to generate commercial tax base that Loudoun will see for decades to come, we believe the Board must commit adequate resources to undertake multiple parallel initiatives as outlined below. Most of our recommendations come with a cost – either in current staff resources or third party vendor costs. We do not make these recommendations lightly and encourage you to keep in mind not only the potential short and long term economic return on this investment but, also the commitment the County has already made to the construction and

operation costs of rail. Today we are at another critical point in this process where the Board has the opportunity to maximize the return on its investment by creating a vision and implementing a plan that produces the highest and best use development to occur within the Rail Tax Districts in a timely manner.

Perhaps one of the biggest obstacles to recognizing revenue in a timely manner is the potentially drawn out schedule of this process. Given the typical timeline of approval, financing and construction of large developments, any project not already approved, financed and shovel ready will likely not be done until after the metro stations open. Time misspent now adds delay and negatively impacts the county's ability to promptly realize tax revenues.

### **Action #1 - Create a Vision**

The ability to encourage appropriate development and recognize increased revenue will be severely inhibited without distinctive, market viable visions for each station. We believe each station must include a mix of office, retail and residential or the land will not realize its greatest economic potential and therefore will not generate meaningful revenue. The longer it takes to create a market viable vision, the longer it will take to recognize meaningful revenue which means every single day counts.

Before the appropriate efforts can be made to achieve the desired land use pattern, there needs to be a vision for each station to guide implementation. Chief among the missing pieces is a rationale for determining the right blend of development types at each of the stations. Having an overall vision will drive the marketing process for the County's Department of Economic Development in addition to giving landowners insight into the County's priorities. From that vision service district plans can evolve and the overall identity of each station developed.

- One of the most timely actions the Board can take is to authorize work to begin on a market study for the area within one mile of the 606 station. At the 606 station, not a single landowner has filed for the current Transit oriented zoning category. This demonstrates that without changes to the master plan at 606, little to no significant development is likely to occur prior to the Silver Line extension opening in Loudoun. That is simply not acceptable. Because of the proximity to the airport, there will be challenges in adopting ordinances with increased residential uses. This means 606, while not easy to tackle, presents the greatest opportunity to do something distinctive and cutting edge. A broad market study, led by a third party and including the land owned by MWAA, would provide the best opportunity to examine ideas and their viability.
- A review of best practices for innovative development that is compatible with airport uses should be initiated and a new master plan with a more viable mix of uses created for the 606 station area. Airport-oriented developments are attracting clusters of national and international corporate headquarters, hotels, entertainment districts, and



convention centers. With Dulles International Airport investing billions of dollars to increase its passenger and cargo capacity, a successful Route 606 TOD can leverage its capital infrastructure investments and add tremendous value to the airport's long-term growth objectives. Given the global dialogue regarding 'Aerotropolis' and 'Airport Cities', we recommend the County conduct a major review and analysis of best practices in land development adjacent to airport areas both internationally and in the US. These best practices may then form the basis of the evaluation of current Route 606 TOD development policies in consideration of area planning and branding for economic development.

- Recognizing that development around the station at 772 is more mature and has begun to shift to TOD related plans, actions taken there have the potential for providing quick, positive impacts in revenue. The master plan for the 772 station area must not be overlooked. Now is the time to review the planned mix of uses to ensure they are viable in today and tomorrow's market. A great plan on paper – that stays on paper for 10, 20 or more years – will not generate revenue or jobs. There is also great opportunity, and a willingness on the part of the landowners to work together creatively – to solve future transportation challenges, fund master plans and create a vibrant identity for the 772 station.

## **Action #2 - Enable the Vision**

Once a vision is adopted for each station, we must work quickly to identify any obstacles in implementing the vision as well as any opportunities to enhance implementation. There are likely significant comprehensive plan policy and zoning changes that need to be made to ensure the land develops – both short and long term – in a revenue positive way. We call on the Board to take swift and significant action to address current inhibitors including, but not limited to, inflexible zoning, uncertainty in the approval process, an undefined implementation process, and a lack of strategic incentives to attract jobs as well as development.

- Review all zoning and land use policies at future rail stations and follow up on regulatory implementation. A streamlined process that adopts development approval practices (keeping legislative approvals to a minimum), allows flexibility in responding to future market conditions and could utilize concepts already in place in the Route 28 CPAM.
- Develop a list of potential public financing options and economic development incentives (financial and otherwise) to be evaluated for their potential to “jump start” high value, desired development that will also prompt other commercial tax positive projects and/or significant employment creation (Convention center, parking, civic or entertainment centers, sports venue, cultural centers, the creation of Technology or Foreign Trade Zones).
- There is an opportunity for a no-cost quick hit by tasking the Fiscal Impact committee to use data from nearby counties (Fairfax, Arlington and Montgomery ) to develop new fiscal impact models for different types of housing (recognizing higher density, lower

square foot options not currently incorporated in today's standard Loudoun zoning process).

- Identify the most critical road and pedestrian projects that need to be in place for the first day of rail service. With that list, and the associated costs, evaluate different options for funding design and construction up front, possibly before proffers are triggered. As the Board recognized with the Gloucester and Mooreview Parkway extensions, the proffers will not always keep up with the need and sometimes require up front funding. This is likely going to be the case near both stations and must be planned for now. Developing a creative form of public-private partnerships with landowners may be one way to tackle these challenges.

### **Action #3 – Market the Vision**

Loudoun County would be remiss if they did not strive to capture the momentum of the Silver Line on the day it arrives. At no other time will the excitement and buzz be stronger and the Department of Economic Development must have the tools needed to capitalize on it.

- Realizing the importance of branding the identity of each stations, we encourage the Board to create a marketing committee tasked with recommending station names, multi-property service district plans and identifying needed marketing materials for economic development efforts. This group can begin work immediately on the 772 station while the 606 station market study is underway.
- Create a nightlife task force to develop a plan for creating a vibrant environment with the goal of attracting employers and a residential demographic that typically has less costs than current residential in the county. This group can also brainstorm how to capture the market that will be created by future commuters and identify off peak uses, further leveraging Loudoun's investment in rail, parking garages and roads.

## Summary

The Economic Development Advisory Commission (EDAC) urges the Board of Supervisors to recognize the opportunities and challenges ahead with regards to the development surrounding the future Silver Line rail stations. The ability to encourage appropriate development and recognize increased revenue will be severely inhibited without a distinctive, market viable vision for each station. We believe each station must include a mix of office, retail and residential or the land will not realize its greatest economic potential and therefore will not generate meaningful revenue. The longer it takes to create a market viable vision, the longer it will take to recognize meaningful revenue which means every single day counts. A revised approval process, review of the current fiscal impact assumptions, creation of service district plans and clarity of vision are key at both stations. Without these even the best vision will not be fully realized. Because the Silver Line extension presents the single largest economic development opportunity to generate commercial tax base that Loudoun will see for decades to come, we believe the Board must commit adequate resources – both staff time and financial support – to undertake multiple parallel initiatives.

We all have a stake in the success of the developments around the future Silver Line rail stations. The residents, landowners, employers and Supervisors share the same goals – ensuring the highest and best use is achieved so the revenue generated by the tax district(s) is adequate to cover the County's financial commitment in a way that represents Loudoun well, creates jobs and avoids gridlock on the roads. Recognizing we are all on the same team and bringing these stakeholders together for ongoing dialogue and implementation of creative approaches is the only way we will succeed.

We present these recommendations on behalf of the EDAC, as voted on by the full Commission on July 11, 2014.